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THE CRISIS OF 1951

Our estimates of the movement in the national product and its main components over the last two years have been completely revised, generally with the use of new methods of estimation. Details of the methods now used are given in Appendix I, but we would like to stress that many of our estimates are necessarily weak. The increase in information, especially the greater detail shown in the latest National Income White Paper and the new price indices, has allowed us to make substantial technical advances, leading, we believe, to greatly improved estimates. But sections of the estimates are still statistically weak, and we would warn those who use any estimate to consider carefully how it is derived. We think that the most useful way of looking at our estimates is to see them as a framework within which one can compare the movements of the main official statistics—production indices, price indices, wage indices, employment estimates, consumption estimates, trade statistics, etc.—and discover what they collectively suggest.

There is really little doubt however about the general conclusion, that the gap in our balance of payments has rapidly opened because production has levelled off since the end of 1950, while home consumption has not fallen, so that no extra resources have been made available to cover the increasing armament expenditure and the worsening of the terms of trade. This commentary analyses the reasons for the overloading of the economy, in the light of our estimates and of the series on which they are based.

THE DIP IN NATIONAL INCOME

The most puzzling feature of Table I is that the national product appears to fall sharply at the start of 1951. In view of the extent of wage rises in the winter, this seems difficult to believe. Inspection of the table shows that the fall is due to the drop in the value of Manufacturing output, and there are two reasons for this. Seasonal fluctuation is not one of them, since this has been eliminated as far as possible.[1]

The first is the definition of income adopted. We follow recent official practice in estimating the ' value added ' by an industry, or by the nation, after deducting materials priced at current prices, not at what they cost when they were bought. This definition implies that during a period of rapidly rising world prices, which have not yet fully affected selling prices at home, ' income ' generated in manufacturing tends to be rather sharply

[1] Appendix II discusses seasonal patterns.

(THE ESTIMATES IN ALL TABLES ARE IN £ MILLIONS, AND AT ANNUAL RATES)

TABLE I. *Seasonally Corrected Gross National Product at Factor Cost*

	1949				*1949 Whole Year*	*1950*				*1950 Whole Year*	*1951*	
	I	II	III	IV		I	II	III	IV		I	II
1 Agriculture	615	620	625	625	*621*	625	615	600	600	*610*	600	610
2. Mining and Quarrying	400	400	400	410	*404*	390	395	395	400	*393*	445	460
3 Manufacturing ...	3,940	4,160	4,280	4,265	*4,159*	4,355	4,485	4,440	4,390	*4,418*	3,990	4,515
4 Building	575	600	615	600	*598*	640	620	620	615	*624*	695	650
5 Utilities	230	235	240	245	*237*	250	250	255	255	*251*	265	270
6 Services	3,750	3,810	3,835	3,860	*3,814*	3,870	3,900	3,940	3,990	*3,925*	4,090	4,110
7 Total Business Sectors	9,510	9,825	9,995	10,005	*9,833*	10,130	10,265	10,250	10,250	*10,221*	10,085	10,615
8 Government	1,140	1,150	1,160	1,170	*1,155*	1,190	1,205	1,235	1,295	*1,227*	1,325	1,380
9 Other	440	455	470	495	*465*	470	495	540	580	*522*	555	535
10 Gross National Product at factor cost ...	11,090	11,430	11,625	11,670	*11,453*	11,790	11,965	12,025	12,125	*11,970*	11,965	12,530

TABLE II. *Seasonally Corrected Gross National Product at 1950 Factor Cost*

	1949				*1949 Whole Year*	*1950*				*1950 Whole Year*	*1951*	
	I	II	III	IV		I	II	III	IV		I	II
1 Agriculture	635	640	640	640	*640*	640	625	590	590	*610*	590	595
2 Mining and Quarrying	385	385	390	395	*390*	390	395	395	395	*393*	405	410
3 Manufacturing ...	3,855	4,020	4,060	4,150	*4,020*	4,240	4,390	4,450	4,595	*4,418*	4,520	4,545
4 Building	575	595	600	610	*595*	610	625	630	630	*624*	580	580
5 Utilities	235	235	235	235	*235*	240	250	250	260	*251*	265	265
6 Services	3,790	3,825	3,860	3,870	*3,835*	3,885	3,920	3,960	3,935	*3,925*	3,990	3,950
7 Total Business Sectors	9,475	9,700	9,785	9,900	*9,715*	10,005	10,205	10,275	10,405	*10,221*	10,350	10,345
8 Government	1,215	1,215	1,220	1,215	*1,215*	1,215	1,215	1,230	1,245	*1,227*	1,275	1,295
9 Other	515	515	520	520	*520*	520	520	525	525	*522*	525	525
10 Gross National Product at 1950 Factor Cost	11,205	11,430	11,525	11,635	*11,450*	11,740	11,940	12,030	12,175	*11,970*	12,150	12,165

reduced. Such a reduction will of course not show up in the books of any firm if it is charging materials at original cost. In order to bring out this point, which is crucial to an understanding of recent developments, we give here the relevant price indices :—

Price Index Numbers for Manufacturing (Average 1950=100)

	1949				*1949 Whole year*	*1950*				*1950 Whole year*	*1951*	
Input prices (Materials & Fuel) :	I	II	III	IV		I	II	III	IV		I	II
1. At current cost ...	78	78	74	82	*78*	86	90	103	121	*100*	147	142
2. At original cost ...	N.A.	N.A.	N.A.	N.A.	*n.a.*	90	95	102	113	*100*	130	148
Income per unit produced:												
3. With input priced at current cost	102	104	106	103	*104*	103	102	100	95	*100*	88	99
4. With input priced at original cost ...	N.A.	N.A.	N.A.	N.A.	*n.a.*	100	100	100	101	*100*	98	99

The rise in material prices from mid-1950 up to the first quarter of 1951, shown by the first index, was so fast that it out-ran the selling prices of manufactures, causing the fall in index number 3. which shows what is happening to the income generated in manufacturing per unit of output *when materials are charged at current cost of replacement.*[1] Since wage costs per unit of output were certainly rising at the end of the year, the first quarter must have brought a sharp fall in 'profits' per unit of output, provided we use an analagous definition of profits, *i.e.* what they would have been after making provision for replacing inventories at current prices. In actual fact, however, the general practice apparently is to charge materials at original cost, *i.e.* to use 'first-in-first-out,' and an approximate index number of input prices on this basis has been constructed (number 2) in order to bring out the difference between income (and profits) on the two definitions.[2] This shows of course a steadier rise, and it had fallen behind index 1 (input prices at current cost) in the first quarter of 1951, but overtook the first index again in the second quarter.

The rise in our output-price index just about covers the rise in input prices when we allow roughly for a time-lag in this way, and index 4 in fact implies almost stable internal income—when it is measured after charging materials at original cost. There was still some slight fall shown for the first quarter of 1951, suggesting that profit margins might have been rather lower, even when calculated on conventional lines.

This is not just a minor theoretical point. One's whole outlook on current national income movements depends on the definition of 'material cost' which is used. If we had priced materials at original cost we would

[1] If in fact materials were charged by firms at current cost, doubtless they would raise selling prices and there would be little or no drop in 'value added'. We are discussing what 'income' is implied by comparing actual output prices with replacement-cost material prices.

[2] It is a weighted average of index 1 with weights of one-sixth, one-third, one-third, and one-sixth to respectively the current and each of three preceding quarters working backwards, and adjusting so that the average for 1950=100.

have obtained estimates of the value of Manufacturing output in 1950 nearly £380 millions higher, and the fall from the last quarter of 1950 to the first quarter of 1951 would have been less than £200 millions. This would have been balanced by the rise in income generated in other sectors, so that little or no change in total national product would have been shown.

Such squeezing of profits is however not the only explanation of the fall in value of Manufacturing output. The other reason was a fall in the quantity of output. This is shown by Table II, which contains estimates from which price changes have been, as far as possible, removed.[1] The fall in (seasonally-corrected) volume of production in Manufacturing and Building[2] about balanced the increases in real output of the Service and Government sectors, shown by the increased manpower they used, so that real national product was in the first two quarters no higher than in the last quarter of 1950.

This stagnation is serious. The economic programme for 1951 as shown in the Economic Survey relied on an increase of £325 millions in national output over 1950 to provide the resources for increased military expenditure and exports; the estimates in the Table for the first half of 1951 average less than £200 millions (at annual rates) above the average level for 1950. Our results contrast so sharply with the satisfaction widely shown at the progress of production that we must analyse them more closely.

The forecast increase in real national product depended mainly on an anticipated increase of 4 per cent in industrial output, and the satisfaction which has been expressed with the progress of output is based on a comparison of output in the early months of 1950 with the corresponding months of 1951. The index for the whole industrial sector shows a rise from 138.9 in January–July 1950 to 144.9 in January–July 1951, slightly exceeding the target increase of 4 per cent, as the former Chancellor and other commentators have frequently pointed out.

It is however fallacious to conclude that because the rise was more than 4 per cent it was satisfactory. The fallacy is revealed if we correct the series for seasonal fluctuation, and use two-monthly averages to smooth the figures. Production rose rapidly till the winter of 1950, since when it has hardly altered, running along a plateau, with a slight dip in the early months (probably due to shortages of fuel and materials) and a slight upturn in the summer, after correcting for the usual fall in the holiday months (see Diagram I). The clue to the current misconceptions is that the opening months of 1950 were low relative to the last four months, so that to exceed them by 4 per cent would only be satisfactory if we could count on a similar swift rise in the autumn of this year—in fact to seasonally-corrected rates of about 150. The average for the whole of 1950 was 140.3, and the target rise of 4 per cent therefore implies an average of 146 for 1951, a rate which was only

[1] One rather extraordinary coincidence is that 1949 national output seems to be the same whether calculated at current factor cost or at 1950 factor cost. This implies that, on our definition, average factor cost per unit of output was unchanged between the two years.

[2] It will be noticed that fall in building output is not reflected in the estimates of value of building work in Table I. This is discussed in the relevant note in Appendix I.

Seasonally Corrected Industrial Production (1946=100)

		Monthly Index	*Two-Monthly Average*
1949	January	124	124½
	February	125	
	March	124	125½
	April	127	
	May	129	129½
	June	130	
	July	127	130
	August	133	
	September	131	130½
	October	130	
	November	133	133½
	December	134	
1950	January	135	135
	February	135	
	March	137	137½
	April	138	
	May	140	139½
	June	139	
	July	144	140½
	August	137	
	September	142	144½
	October	147	
	November	146	144½
	December	143	
1951	January	140	143
	February	146	
	March	143	144
	April	145	
	May	142	143½
	June	145	
	July	150	146
	August	142	
	September	144	

(On the basis of the latest information, the index number for October suggests a seasonally-corrected rate of 146).

attained twice in the first 8 months, after correction for seasonal influences. It seems unlikely that the index numbers for the autumn months will more than barely cover those for the corresponding months last year. What will happen therefore is that the increase over 1950 shown by successive cumulative totals (for the first 9 months the first 10 months, and so on) will fall until it is clear to every commentator that the target cannot be reached.[1]

THE FALL IN PROFITS

The squeezing of profit margins and the dip in output are reflected in a fall in profits in the first quarter of 1951. This is also quite contrary to popular belief. The analysis above shows that one's view of the change

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[1] There are however two possible technical explanations, that may partially account for production levelling off. The series for munitions in the Interim Index of Industrial Production are based on *payments* made by the Government, and these may fall rather in arrears of output—at least in cases where progress payments are not made. Secondly, conversion to military production must have involved some temporary loss of output. These are however only minor qualifications, that could not account for the drastic change in the slope of the production index shewn in Diagram I; and the difficulties due to retooling must have been taken into account in fixing the production target.

TABLE III

Seasonally Corrected National Income and Depreciation, by Distributive Shares

	1949				*1949*	*1950*				*1950*	*1951*	
	I	II	III	IV	*Whole year*	I	II	III	IV	*Whole year*	I	II
1 Wages	4,150	4,200	4,270	4,300	*4,230*	4,370	4,420	4,470	4,620	*4,470*	4,760	4,880
2 Salaries	2,290	2,330	2,370	2,410	*2,350*	2,440	2,480	2,520	2,560	*2,500*	2,600	2,680
3 Forces' Pay	255	250	245	240	*246*	240	235	245	285	*250*	300	310
4 Employers' Contributions	195	195	195	195	*195*	195	195	200	200	*198*	200	200
5 Rent	480	480	485	485	*483*	490	495	495	500	*496*	500	505
6 Gross Profits[1] ...	(3,720)	(3,975)	(4,060)	(4,040)	*3,949*	(4,055)	(4,140)	(4,095)	(3,960)	*4,056*	(3,605)	(3,955)
7 Gross National Product at Factor Cost...	11,090	11,430	11,625	11,670	*11,453*	11,790	11,965	12,025	12,125	*11,970*	11,965	12,530

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[1] Including profits of sole traders, farmers, professional people and other self-employed ; *gross* of depreciation allowances ; and charging withdrawals from stock at replacement cost.

in profits depends largely on the definition of ' profits ' used. Profits are shown to fall on our analysis because we are dealing with what profits in Manufacturing would have been if materials had been charged at their current prices, but output prices had been as they actually were.[1] Company accounts apparently in general treat profits differently, showing what they are after charging at original cost materials drawn from stock. If our income estimates used this definition of profits (*i.e.* if we allowed for the delay before new prices are charged in cost sheets), we would obtain the following series :

	1950				1951	
(£m. at annual rates)	I	II	III	IV	I	II
	4190	4290	4375	4470	4335	4215

The buoyancy of published accounts is misleading for two reasons : they reflect the inventory gains made in the sharp price rise of last winter[2] which are not likely to be repeated on such a scale; and they are influenced by the particularly favourable trading results in the last half of 1950 when exports were booming but the rise in costs and shortages of materials had not yet fully taken effect. It is unlikely that profit results will continue to show such buoyancy when they refer wholly to 1951—except of course for industries benefitting from rearmament orders. To what extent profits will level off depends on the success with which firms using first-in-first-out systems of accounting have managed to keep to them in the period of recession of commodity prices.

The distribution of income had in fact turned against profits for the first half-year.[3] This induced a temporary rise in inflationary pressure. The truth of this deduction is perhaps more apparent if we look at the question the other way round : because of first-in-first-out systems, prices had not risen enough at the New Year to match wage increases. This will be discussed at greater length in the next section. Incidentally, our analysis does show that the traditional picture of price inflation as being to some extent self-correcting, by making income distribution more favourable to profits, and thus reducing inflationary pressure, seems inadequate to cover the impact effect of a sudden price rise on an economy in which ' first-in-first-out ' is widely used.[4]

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[1] We have however not attempted to treat profits in Distribution (or any other Services) in this way.

[2] To charge withdrawals from stock at original cost in effect includes in ' trading profits ' the inventory gains on those withdrawals.

[3] Doubtless if inventory gains were fully taken into account the share of profits would not appear to have deteriorated like this. Still we are concerned here with profits other than those due to (and needed to offset) stock appreciation.

[4] Provided there are some wage increases, *i.e.* that the price rise is not wholly imported from abroad, or exports are increased to restore the balance of payments. There will, of course, be a corresponding disinflationary tendency during falling prices. In brief, ' first-in first-out ' accounting dampens price fluctuations at the expense of making fluctuations in effective demand more severe.

TABLE IV

Final Consumption at Current Prices Seasonally Corrected

	1949 I	1949 II	1949 III	1949 IV	*1949 Whole Year*	1950 I	1950 II	1950 III	1950 IV	*1950 Whole Year*	1951 I	1951 II
1. Food	2,265	2,390	2,415	2,510	*2,396*	2,575	2,605	2,565	2,680	*2,608*	2,720	2,860
2. Drink	720	720	720	720	*719*	705	715	745	730	*724*	770	740
3. Tobacco	765	765	770	755	*764*	765	775	775	795	*778*	815	810
4. Rent and Rates	610	610	615	615	*613*	620	630	630	635	*629*	635	650
5. Fuel and Light	350	340	345	345	*346*	365	375	380	390	*376*	400	440
6. Household goods	560	600	610	615	*596*	660	650	685	715	*679*	845	775
7. Clothing	940	990	910	970	*952*	970	970	1,045	1,035	*1,005*	1,185	1,065
8. Other	2,160	2,175	2,205	2,180	*2,181*	2,195	2,230	2,275	2,260	*2,241*	2,325	2,350
9. Total	8,370	8,590	8,590	8,710	*8,567*	8,855	8,950	9,100	9,240	*9,040*	9,695	9,690

TABLE V

Final Consumption at Average 1948 Prices, Seasonally Corrected

	1949 I	1949 II	1949 III	1949 IV	*1949 Whole Year*	1950 I	1950 II	1950 III	1950 IV	*1950 Whole Year*	1951 I	1951 II
1. Food	2,255	2,300	2,305	2,335	*2,299*	2,375	2,360	2,390	2,390	*2,379*	2,375	2,390
2. Drink	730	730	730	725	*728*	735	740	790	765	*759*	845	770
3. Tobacco	755	755	755	740	*751*	755	755	750	770	*757*	785	780
4. Rent and Rates	605	610	610	610	*609*	615	615	620	620	*618*	625	630
5. Fuel and Light	335	335	345	340	*339*	350	355	370	370	*361*	360	390
6. Household Goods	550	590	595	610	*587*	645	635	660	665	*650*	745	660
7. Clothing	895	930	880	930	*909*	930	915	995	945	*945*	1,045	870
8. Other	2,145	2,135	2,135	2,135	*2,138*	2,140	2,150	2,135	2,140	*2,144*	2,240	2,180
9. Total	8,270	8,385	8,355	8,425	*8,360*	8,545	8,525	8,710	8,665	*8,613*	9,020	8,670

THE RISE IN CONSUMPTION

During 1949 and 1950, consumption changes followed a familiar and fairly stable pattern. Expenditure continued to increase rapidly, and there was an associated increase, though at a slower rate, in the volume of consumption. By contrast the changes in the first two quarters of 1951 were distinctly abnormal. In the first quarter, consumption expenditure (seasonally-corrected) was very high, due to a sharp increase in the volume of consumption. In the second quarter, consumption expenditure increased very little, and the volume of consumption fell substantially. Interpretation of these changes must, however, be cautious.

Some clues are provided by a comparison of changes in income and in prices.

Income and Price Indices
(Average 1948 = 100)

	1950				*1950*	1951	
	I	II	III	IV	*Whole Year*	I	II
Wage-bill (from Table III) ...	109	110	111	115	*111*	118	121
Salary-bill (from Table III) ...	†	†	†	†	*114*	118	122
Working-class retail prices[1] ...	105	106	105	107	*106*	109	114
National retail prices[2]	104	105	105	105	*105*	107	112

† This series is too much dependent on assumptions to justify separate quotation over this period.

[1] From the Interim Index of Retail Prices, *i.e.* using 1937–8 working-class purchases for quantity weights.

[2] From the Monthly Digest of Statistics, weighting by 1948 purchases. See Appendix III.

We should emphasise that we are dealing here with total income, not with average earnings, still less with rates of pay, since our concern is with total buying power. We are quoting estimates gross of tax payments, and these climb rather more sharply than disposable income, particularly in the case of salaries. We are also ignoring other types of income, such as pensions, property income and the profits of the self-employed, but wages and salaries now account for two-thirds of disposable income.

From the third quarter of 1950 to the first quarter of 1951, total wages rose more sharply than working-class retail prices—doubtless for the reasons discussed in the previous section. In the second quarter however, the rise in wages was outpaced by the price rise, involving a fall in total real wages. The real value of the wage-bill would seem however to have been then still above the average for 1950.

For salaries it is more relevant to use the index for all retail prices, implied by comparing two sets of official estimates of consumption, those at current prices and at 1948 prices. The total salary-bill may have kept its real purchasing power in the first quarter, but it too fell behind price rises in the second quarter, particularly if one takes taxation into account, though its real value may still not have been below that of 1950.

Still, the rise in the real value of consumption due to the rise in the buying power of earned incomes *in the first quarter* would only have been of the order of some £50 m. (at annual rates). Since the real value of other incomes can hardly have increased, the remainder of this quarter's rise of over £300 millions (in 1948 prices) must have been attributable to expectations of shortages and of price rises- -notice particularly the exceptionally high expenditure on clothing and household goods, which account for most of the increase. The check to rising consumer expenditure, in the second quarter, was also largely due to decreases in expenditure on such lines, involving an even larger fall in their volume of consumption. If, as seems likely, purchases in the first quarter anticipated purchases some of which could otherwise have been made in the second quarter, the changes must be interpreted to some extent as a redistribution of expenditure between the quarters. It would certainly be unrealistic to suggest that the estimates for the first and second quarters indicated necessarily a downward trend in consumption : in fact even the fixed-price total for the second quarter of 1951 (which we suggest is deceptively low) is over £50 millions higher than the 1950 average, whereas the Economic Survey based its plans for the year on an anticipated fall of £50 millions (at 1950 prices) in consumption below the level for 1950—and stated that any shortfall in production would be concentrated ' so far as possible ' upon consumption. (See Diagram II). The increase in consumers' purchases denotes therefore an even greater failure to fulfil the stated economic programme than appears at first sight : doubtless if the poor production results had been foreseen a still larger cut would have been attempted in real consumption. See Diagrams I and II.

The second quarter also shows drink and tobacco expenditure still above the average for 1950, and spending on these items has been a fairly reliable indication of inflationary pressure in recent years. Since the price rise has been less steep, while wages at least have continued to rise, the level of consumption, outside textiles, may well have been maintained, and appears unlikely to be releasing resources for re-armament and exports at the required rate.

The Import Surplus

The combination of production failing to reach expectation, and of consumption exceeding what was anticipated, has naturally meant (in a period of rising Government expenditure) that the balance of payments has sharply deteriorated. The fall from an export surplus of £405 millions in the last quarter of 1950 to an import surplus of £105 millions in the first quarter of 1951 (in annual rates) was certainly very sudden, but this really understated the deterioration because the first quarter is usually a good one, and after seasonal correction the import surplus looks much worse—£265 millions. On the other hand the crude import surplus in the second quarter, £385 millions, rather overstates the problem, since this quarter is generally a poor one, with high imports and low exports[1]—even in 1950 the second quarter showed a deficit. The deficit in the second quarter of 1951 after correcting for seasonal influences was about £205 millions, a slight improvement on the first quarter.

[1] See Appendix II.

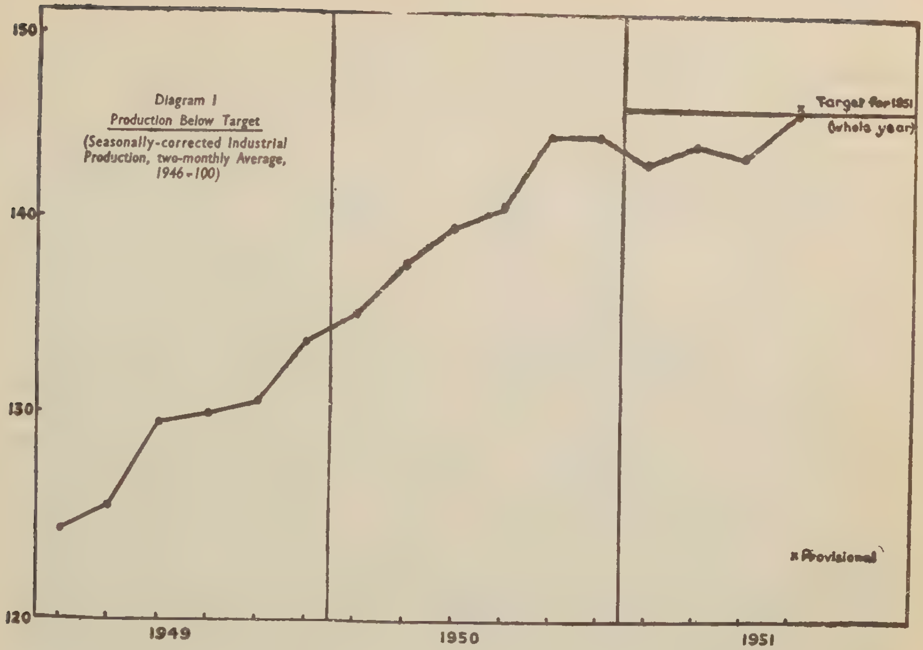

Diagram I
Production Below Target
(Seasonally-corrected Industrial Production, two-monthly Average, 1946=100)

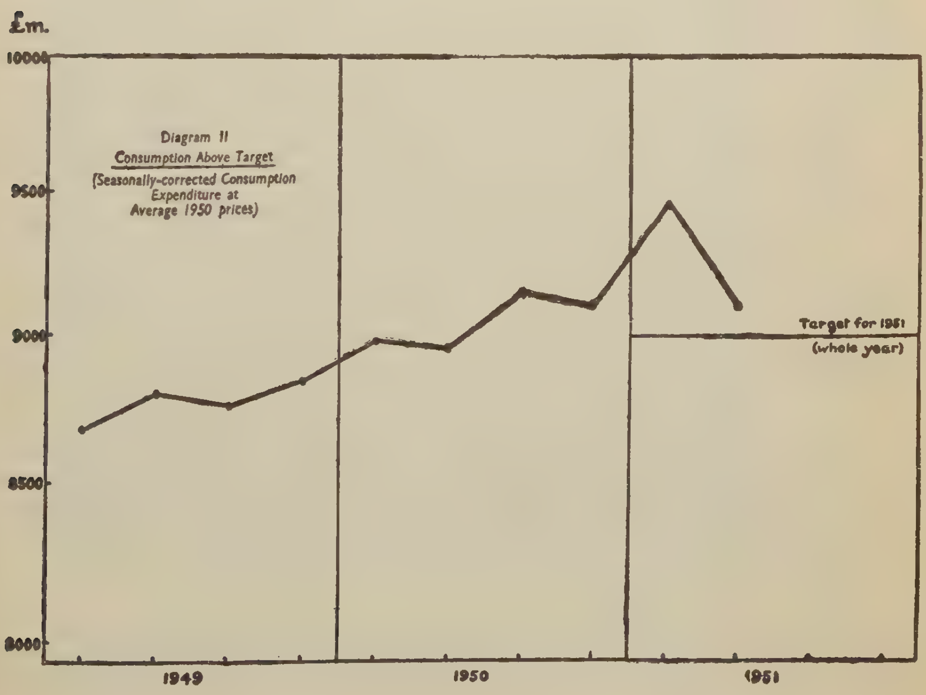

Diagram II
Consumption Above Target
(Seasonally-corrected Consumption Expenditure at Average 1950 prices)

TABLE VI

Foreign Trade, NOT Seasonally Corrected

	1949				*1949 Whole Year*	*1950*				*1950 Whole Year*	*1951*	
	I	II	III	IV		I	II	III	IV		I	II
1. Visible Imports	1,850	2,000	1,970	2,070	*1,973*	2,200	2,460	2,310	2,555	*2,382*	3,005	3,570
2. Invisible Imports	500	510	595	530	*535*	525	520	570	545	*540*	585	635
3. Total Payments	2,350	2,510	2,565	2,600	*2,508*	2,725	2,980	2,880	3,100	*2,922*	3,590	4,205
4. Visible Exports	1,885	1,775	1,710	1,915	*1,822*	2,095	2,065	2,240	2,490	*2,223*	2,455	2,765
5. Invisible Exports	650	680	720	775	*707*	825	890	950	1,015	*920*	1,030	1,055
6. Total Receipts	2,535	2,455	2,430	2,690	*2,529*	2,920	2,955	3,190	3,505	*3,143*	3,485	3,820
7. Surplus (+) or Deficit (—)	+185	—55	—135	+90	*+21*	+195	—25	+310	+405	*+221*	—105	—385

TABLE VII

Foreign Trade, Seasonally Corrected

	1949				*1949 Whole Year*	*1950*				*1950 Whole Year*	*1951*	
	I	II	III	IV		I	II	III	IV		I	II
1. Visible Imports	1,925	1,900	1,970	2,095	*1,973*	2,290	2,340	2,310	2,585	*2,382*	3,130	3,430
2. Invisible Imports	510	530	550	550	*535*	540	535	535	550	*540*	595	650
3. Total Payments	2,435	2,430	2,520	2,645	*2,508*	2,830	2,875	2,845	3,135	*2,922*	3,725	4,080
4. Visible Exports	1,865	1,815	1,750	1,860	*1,822*	2,075	2,110	2,285	2,420	*2,223*	2,430	2,820
5. Invisible Exports	650	680	710	785	*707*	825	890	945	1,020	*920*	1,030	1,055
6. Total Receipts	2,515	2,495	2,460	2,645	*2,529*	2,900	3,000	3,230	3,440	*3,143*	3,460	3,875
7. Surplus (+) or Deficit (—)	+80	+65	—60	—	*+21*	+70	+125	+385	+305	*+221*	—265	—205

This deterioration was partly due to a rise in the volume of imports, though this had been officially anticipated, and partly to an unexpected fall in the volume of exports in the first quarter, a fall which must have been partly attributable to the corresponding rise in real consumption in the same quarter. The chief reason is however a further violent worsening of the terms of trade after the start of the year. This was not expected in the Economic Survey, which implied that the terms of trade would be better than they were in February. It is true that this prediction was for the rest of the year as a whole, but the deterioration went too far in the second quarter for it to be possible of fulfilment.

The summer fall in import prices might nevertheless seem to promise a better balance of payments later in the year. The Board of Trade returns, however, make it quite clear that the merchandise deficit increased again for the third quarter. It seems that the volume of imports, as well as their price, remained well above the 1950 level. The outlook is made still more gloomy by the decline of the ' invisible ' surplus in the second quarter, which may have continued into the third quarter. Even if this decline had been checked, and if we allow for unfavourable seasonal factors, it seems very unlikely that the deficit in the third quarter was running at less than an annual rate of £600 millions. Only a further considerable rise in the volume of exports, of which there is little sign as yet, can avert another major crisis in the balance of payments. This boom in exports will be particularly difficult to achieve, because the problem over a large range of goods, notably engineering products, is the inability to deliver rather than to sell. Thus the ' classic remedy ' for an adverse balance of payments, devaluation, would be little help, and might well reduce our earnings of foreign exchange. The classic conditions, notably elastic demand for our exports, and some elasticity in supply, scarcely exist. In fact for metal products, our prices are in general too low. Such products are badly needed at home: they incorporate steel, and (indirectly) electricity and coal, whose value to us is hardly indicated by the present domestic prices; and their slow price rise was the main cause of the sharp turn against us in the terms of trade.[1] If all our exports were such products, with long delays in delivery, an obvious help would be appreciation of the pound. However demand for textiles seems much more elastic, and their sales might at present be hampered by appreciation, unless the textile industry had some special assistance.

The problem is one of shedding to some extent the particularly great burden that Western rearmament places on us, because of the deterioration in our terms of trade. Up to the present this burden has been partly shifted by in effect borrowing from the rest of the world. Apart from a dollar crisis, this means a severe strain on the structure of the sterling area, whose members will grow restive at the accumulation of unspendable sterling

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[1] From August 1950 to August 1951 import prices rose 38 per cent, which was *less* than the increase in the prices of our textile exports (44 per cent), but much more than the price rise for exports of metal goods (15 per cent).

TABLE VIII

Gross National Expenditure at Current Prices, Seasonally Corrected

	1949				1949	1950				1950	1951	
	I	II	III	IV	Whole Year	I	II	III	IV	Whole Year	I	II
1. Gross National Product factor cost	11,090	11,430	11,625	11,670	11,453	11,790	11,965	12,025	12,125	11,970	11,965	12,530
2. Net Indirect Taxes ...	1,490	1,470	1,505	1,445	1,480	1,445	1,615	1,695	1,655	1,602	1,710	1,735
3. Gross National Product at current market value	12,580	12,900	13,130	13,115	12,933	13,235	13,580	13,720	13,780	13,572	13,675	14,265
4. Consumption	8,370	8,590	8,590	8,710	8,567	8,855	8,950	9,100	9,240	9,040	9,695	9,690
5. Government Current Expenditure	2,030	2,030	2,040	2,050	2,039	2,050	2,030	2,010	2,020	2,025	2,075	2,275
6. Gross Capital Investment	(2,100)	(2,215)	(2,550)	(2,355)	2,306	(2,260)	(2,475)	(2,225)	(2,215)	2,286	(2,170)	(2,505)
7. Export Surplus (+) ...	+80	+65			+21	+70	+125	+385	+305	+221		
or Deficit (—) ...			—60								—265	—205

TABLE IX

Gross National Expenditure at Average 1950 Prices, Seasonally Corrected

	1949				1949	1950				1950	1951	
	I	II	III	IV	Whole Year	I	II	III	IV	Whole Year	I	II
1. Gross National Product at average 1950 factor cost	11,205	11,430	11,525	11,635	11,450	11,740	11,940	12,030	12,175	11,970	12,150	12,165
2. Net Indirect Taxes ...	1,540	1,575	1,605	1,550	1,570	1,555	1,585	1,660	1,615	1,602	1,680	1,645
3. Gross National Product at average 1950 market value	12,745	13,005	13,130	13,185	13,020	13,295	13,525	13,690	13,790	13,572	13,830	13,810
4. Consumption	8,680	8,795	8,760	8,840	8,770	8,975	8,950	9,140	9,095	9,040	9,450	9,090
5. Government Current Expenditure	2,150	2,130	2,135	2,125	2,135	2,100	2,055	2,000	1,940	2,025	1,965	2,060
6. Gross Capital Investment	(1,910)	(2,140)	(2,605)	(2,415)	2,270	(2,185)	(2,450)	(2,225)	(2,305)	2,286	(2,250)	(2,295)
7. Export Surplus (+) ...	+5					+35	+70	+325	+450	+221	+165	+365
or Deficit (—) ...		—60	—370	—195	—155							

balances. To counter the adverse turn in the terms of trade, by raising the prices of metal goods in some way, would seem likely on balance to ease the burden without such a severe strain on the loyalty of the sterling area.

Central Weaknesses

The two tables showing estimates of gross national expenditure bring all these developments into one frame. We see here again the fall in national product in the first quarter, due to the fall in profit margins outweighing the increases in wages and salaries (when profit margins are calculated on a replacement-cost basis), and to the dip in output. Because consumption and Government expenditure rose sharply, the balance of payments abruptly declined —imports being higher and exports being diverted into the home market. Prices rose in the second quarter, with the re-establishment of profit margins, causing a rise in national income. Since consumption stayed unchanged in money terms, this permitted a rise in Government spending on current account, presumably for armaments, without further deterioration of the balance of payments. (Our estimates of Government expenditure are of course very tentative, but we believe they show the shape of changes in expenditure without very great errors). However it seems that the rise in armament expenditure had as yet been relatively small.

When working on estimates which show what would have happened if price changes had *not* occurred, a very different picture emerges. The most striking feature is that the continuation of average-1950 import and export prices, even though they were already (by past standards) unfavourable to us, would have enabled us to have a substantial surplus on current account for the first half-year, despite the stagnation of production and the growth of military expenditure. A comparison of the figures in the two tables implies that the deterioration in the terms of trade was costing us about £575 millions p.a. by the second quarter. Comparing the second quarter of 1951 with the fourth quarter of 1950, in the fixed-price table, we are moreover struck by the similarity. Production, consumption and investment were about unchanged, while the export surplus lost the £100 millions rise that occurred in Government spending. The fall of £500 millions in the balance of payments at current prices can therefore be explained as being due slightly to rising Government expenditure, but far more to worse terms of trade.

The effect of the terms of trade has however diverted attention from the underlying and more profound reasons for our difficulties, namely the stagnation of output and the inflexibility of consumption. (See Diagrams I and II).[1] Even if our terms of trade improve, as they have done in the third quarter, it will be very difficult to avoid a continuous deficit in the balance of payments as armament expenditure rises, so long as the Service Ministries have to compete with exporters for a volume of goods that scarcely rises at all

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[1] The vertical logarithmic scales are identical in both diagrams, so that a comparison of the slopes of both graphs shows whether proportionate changes over any period were different.

—-the volume left by consumption out of output. During the period of acceleration, military expenditure will presumably rise (in annual rates) by about £200 millions a quarter.

The basic inflexibilities do not appear likely to yield readily to measures of policy. The inflexibility of production must be due to shortages of fuel and materials which certainly do not look like diminishing, while consumption appears inflexible until such time as large sections of the population are prepared to accept a fall in living standards, by foregoing increases in income as prices rise. Disinflation of the market for consumers' goods, apart from being extremely difficult to achieve, would in any case hardly be as useful a remedy as is widely believed. The men and plant released would not readily be shifted into the heavy industries on which the competing demands of the economy are focussed, and which produces almost daily new ' bottlenecks ' that hamper production. It is this sector that must be reached if the country's economic crisis is to be solved. There is bound to be some attention given to reducing capital investment in these circumstances. But accumulation of stocks is official policy, based on strategic grounds, and obviously in the national interest; the conversion to a quasi-military economy involves considerable investment in industry, which is at present far from excessive, anyway; investment in electricity generation and coalmining are essential if we are to avoid even more severe shortages of fuel and power; and *reduction* of housebuilding would be a particularly bitter medicine for the new Government.

In brief the economic programme of both major parties does not ' add up '. Maintenance of our present living standards *and* a balance in oversea payments *and* a heavy armaments programme apparently cannot all be provided, or even nearly provided, by the British economy, with the present unfavourable terms of trade and shortages of fuel and materials.

P. D. Henderson
D. G. Holland
Dudley Seers.

POSTSCRIPT: THE CHANCELLOR'S STATEMENT OF NOVEMBER 7TH

How does the provisional programme of the new Government look in the light of the above analysis?

On external trade, the Chancellor made a number of forecasts about 1952, which taken together show the official expectations of the balance of payments. Since the items were mutually compared and one was in end-September (1951) prices, the others must have been also. Making a reasonable allowance for invisible imports, the Chancellor's brief must have contained balance of payments estimates roughly as follows (at end-September prices):

Merchandise imports (after cuts)[1]	3,620
Invisible imports	680
Total payments	4,300
Less Import surplus anticipated	150–250
Total receipts anticipated	4,050–4,150

The residual import surplus of about £200 millions might not look formidable, but some of the assumptions seem rather optimistic. No allowance appears to have been made for a possible unfavourable turn in the terms of trade, as U.S. military expenditure further increases; and our provisional estimates show receipts for the third quarter running at about £3,830 m. (annual rates). So a further increase in the volume of exports is implied by the Chancellor's statement. The programme is however admittedly provisional: the significance of the import surplus that is still left depends very much on the outcome of the Washington talks.

The Chancellor had little to say yet about internal adjustments. The economies in imports will, however, widen considerably the gap between disposable income and the value of available consumer goods and services, and thus increase inflationary pressure. To obtain this increase in exports will involve, therefore, either fiscal measures designed to reduce this gap or an extension of rationing to prevent it hampering the export drive. The effects of the increase in the Bank rate and of the funding operation can only be small, compared to the 'inflationary gap' that will be opened as imports are reduced and armament expenditure rises.

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[1] *Hansard*, Col. 197. It is not clear from the context whether this is *before* or *after* cuts, but the former would be impossible since it would indicate a level well under current imports, even before the cuts.

[2] The import surplus 'of the order of between £500 million and £600 million' on the original programme (Col. 192) less the £350 millions economies.

APPENDIX I

TECHNICAL NOTES

The estimates in all tables are compatible with those in the latest National Income White Paper (Cmd. 8203) and the latest Balance of Payments White Paper (Cmd. 8379), the official definitions being followed throughout.

TABLE I. GROSS NATIONAL PRODUCT AT CURRENT FACTOR COST

This table is slightly different in form from similar tables prepared by us in the past. First, the aggregate is now given gross of depreciation. It would be difficult to allocate legal depreciation allowances between quarters, while our previous practice of allowing replacement-cost depreciation was somewhat arbitrary. We feel it would be an unnecessarily weak item, now that our other estimates have, we believe, improved. Over such a short period changes in depreciation will be small, and it seems to us better to work gross of depreciation allowances. Secondly, we agree with the current practice of the official estimators in preferring to estimate what the National income (and thus profits) would have been if materials were priced at replacement cost instead of original cost.[1]

The other major change is that we now attempt more detailed estimates. We still do not feel able to give separate estimates for the sectors in the groups 'Services' and 'Government', but we do now show estimates for each of the four sectors that make up the group once called 'Industry' in our estimates. This is made possible by two developments—the analysis in the White Paper of the value of industrial output into its four main headings 'Mining,' 'Manufacturing,' 'Building' and 'Utilities', and the publication of parts of the new wholesale price index, showing price indices for the 'output' and 'input' (or material purchases) of different industries.

Item 1. *Agriculture*

These estimates are based on data supplied to us by the Ministry of Agriculture, for which we are most grateful. This has the same coverage as item 1 in Table 1 of the White Paper, including forestry and fishing.

2. *Mining*

We now use the new index of coal output prices for this sector. The principles of estimating 'added value' are discussed below, in the note to the next item. This discussion will show that strictly we should be using an index of the cost, including profit, *within the industry*, per unit of output, not just the selling price, which includes the effect of material price increases. In the case of mining, however, which has a relatively small proportion of material purchases, we felt that the best course was to assume that movements in prices of total output would reflect closely the movements in added value per unit of output.[1] Multiplying this series by the output index gives us an index of added value at current factor cost. The estimates for 1950 have been adjusted downwards to conform to the rather low estimates in the White Paper for that year.

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[1] The reasons for concurring with official practice are discussed by P. D. Henderson in THE BULLETIN for April, 1951.

3. *Manufacturing*

We shall start by explaining briefly the principles used for this sector. We want to bring the White Paper's estimate of ' value added ' in 1950 up-to-date. We do this by multiplying it by a volume index, representing changes in work done, and by a price index, representing changes in ' added value,' (*i.e.* Wages, Salaries, Profits, Rent, Interest and Depreciation) per unit of output. Added value per unit of output we shall call for short ' unit factor cost '. There are of course no indices of ' unit factor cost ' available, but two possible approaches are open to us.

First we could estimate labour cost per unit of output from the earning-enquiries, but these are only available six-monthly—and then with a considerable delay; they only cover one week in the period; and their use involves the assumption that hourly labour cost is a constant proportion of total unit factor cost, which is unreasonable for the recent past. So we avoid their use as far as possible. The other approach is to attempt to construct indices of ' unit factor cost ' from the price indices available. One is tempted to assume that unit factor cost will vary with output prices (what a lot of trouble such an assumption would save !). This may be a reasonable assumption when input costs are a small part of the total value of output, but it is inherently unreasonable otherwise, and quite hopelessly wrong for the recent past, in view of the sharp rise in prices of imported goods. Unless output prices move parallel to input prices, unit factor cost will change at a different rate from output prices. Should output prices rise faster than input prices, unit factor cost will rise faster still; and if output prices lag behind input prices, which has been more usual over the past few quarters, unit factor cost lags even more, or perhaps falls, indicating a probable fall in profits per unit of output—*i.e.* the profits that would be shown by a ' replacement-cost ' system of accounting. We should in principle therefore take both output and input prices into account, constructing from them a composite index which gives a negative weight to the latter.

The assumptions and structure of the index come out more clearly if we show the argument algebraically :

Let ' p ' and ' q ' as usual refer to prices and quantities; the suffixes ' b ' and ' t ' to the base year and the period for which information is required. The prefix 'A' before the summation sign indicates that we are summing ' added values '.

Then the required added value, ${}_{A}\Sigma p_t q_t$, can be written as

$${}_{A}\Sigma p_t q_b \times \frac{{}_{A}\Sigma p_t q_t}{{}_{A}\Sigma p_t q_b} \times \frac{{}_{A}\Sigma p_t q_b}{{}_{A}\Sigma p_b q_b}$$

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[1] In terms of the discussion below, we assume I′ to be low compared to O′.

For our present purpose 'b' is 1950, and thus the first term is given by the National Income White Paper. For the second term, we can use the 'Manufacturing' Section of the Industrial Production Index. There are two snags about this. First, most of the indicators are 'output' series (and where not, they are 'input' series), so that we are tacitly assuming, as any use of the Index does, that an output indicator would equal a 'work done' indicator[1] This can be shown by a simple transformation to be equivalent to the assumption that 'work done' bears a constant proportion to total quantity of output, *i.e.* that the same proportion of gross output is produced *inside* the industries concerned as in the base year. This is a reasonable enough assumption in the short run, though it might be affected by technical changes in the longer run. It should be emphasised that we are talking now in 'physical' terms here, not 'value' terms, so that the recent rise in the ratio of material costs to output prices is here irrelevant. The second difficulty is that in the formula shown here we need current price-weights, *i.e.* a Paasche-type index, whereas the Production Index is 1946-weighted.[2] It may be possible to reweight the Production Index when it is revised with 1948 weights from the Census of Production, and when more wholesale price series are available, but for the present we can only use the production index as it stands. This also ought to make little difference for short-period comparisons.[3]

The last factor, the 'unit factor cost' index, is more difficult to estimate, and it is here that we strictly need to use both output and input price series. If we use the suffixes 'O' or 'I' to show that the summation is in respect of 'Output' or 'Input', the last term can be expanded to :—

$$\frac{{}_{O}\Sigma p_t q_b - {}_{I}\Sigma p_t q_b}{{}_{A}\Sigma p_b q_b}$$

which equals

$$O'\frac{{}_{O}\Sigma p_t q_b}{{}_{O}\Sigma p_b q_b} - I'\frac{{}_{I}\Sigma p_t q_b}{{}_{I}\Sigma p_b q_b}$$

where O′ and I′ represent output and input respectively expressed as a proportion of added value.[4]

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[1] This is clear if one arranges the numerator as the product of base year added value and a quantity indicator.

[2] We could instead obtain the current added value by using a 1950-weighted quantity and a Paasche-type price index, but this combination would be just as difficult to obtain in practice.

[3] It is actually merely 1946-*price*-weighted. The result of dividing a production index number by the average for 1950 is to yield

$$\frac{\Sigma p_{46} q_t}{\Sigma p_{46} q_{50}}$$

[4] A production index, since it is also concerned with 'added value' should strictly not depend, as the present ones do, on *input* relatives or *output* relatives, but on both, whenever possible—with the formula (for a Laspeyre-type) :—

$$O'\frac{{}_{O}\Sigma p_b q_t}{{}_{O}\Sigma p_b q_b} - I'\frac{{}_{I}\Sigma p_b q_t}{{}_{I}\Sigma p_b q_b}$$

This would dispose of the necessity to assume a constant ratio between 'work done' and either output or input, which introduces an avoidable error, particularly in long-period comparisons.

The difficulties here are similar to those for the production index. The indicators are not always suitable, though the new wholesale price index makes this approach much more feasible, since it shows both ' output ' and ' input ' series. Secondly, the weighting-base should be 1950, but perforce we use here too the (1946) weights of the Production Index. These may not however be very far out for our purpose, particularly since the greatest production increases tend to be associated with the smallest price rises. There may be some compensation of errors also in the final estimate of value of output, obtained from the price and production series, in so far as the industries with the relatively small price rises are also those with the relatively largest increases in productivity over the recent past, so that the effect of changes in relative prices since 1946 may not bias the answer as much as appears at first sight. Certainly the biggest source of error in the estimates for this sector is in the price indicators rather than in weighting systems.

The ' unit factor cost ' index is constructed from both ' output ' and ' input ' price series. The former is built up from 11 series, each of which has been selected as the most suitable for an industry or group of industries, weighted by the Industrial Production index weights, *i.e.* approximately by 1946 ' added values '. We now use three of the new wholesale price series of the Board of Trade, those for ' china and earthenware ' and ' chemicals ' are directly relevant, while the ' building materials ' price index has been used for the ' bricks, cement, etc.', industry. The coverage is not identical in the last case but it is certainly the best index available. These cover one eighth of the weights of the index of output prices. One quarter of the total weight is still carried for lack of alternative by hourly earnings indices, and one half by export price indices while the old wholesale price index for iron and steel carries the remainder.

Previously we used the import price index as our sole indicator for ' input ' prices. We now use the price index for the ' basic materials ' of non-food manufacturing industries. While we were making this change, we felt we should also allow for purchases of power which are not covered by the ' basic materials ' index, and for this we use the ' fuel and light ' price index of the Interim Index of Retail Prices, which is not quite satisfactory but better than ignoring power altogether. After looking at the total value of output of the fuel industries, and at the information on industrial consumption of fuel and on the value of the imports likely to be bought by industry, we decided to give ' basic materials ' nine times the weight of ' fuel ' in the index of input prices.

These estimates also suggest that inputs were equal to about half the total ' value added ' in manufacturing in 1950, or about a third of gross output. For the composite index we therefore used a weight of 3 for ' output ' and -1 for ' inputs '. An important change is that we now no longer lag the input price index to produce estimates of ' added value ' corresponding to actual accounting practice (in so far as it follows ' first-in-first-out ' conventions). Our estimates now therefore show what 'added value' would have been if materials had been charged at replacement cost, following White Paper practice.

This composite index was compared with that implied by the National Income White Paper, and while both showed a fall, ours showed a rather sharper one. This was believed to be mainly due to the failure of some output indices (notably the earnings series) to respond sufficiently rapidly to price rises after the Korean war started, and the figures for the last two quarters of 1950 were therefore adjusted to make our answers compatible with the White Paper.

4. *Building and Contracting*

The problem of estimating the output of this industry is a rather special one, for we already have a series of total value of output for each quarter published in the Monthly Digest of Statistics, and we have only to correct this series seasonally and to prepare a series for value of input, to give ' added value ' by subtraction.[1] For the ' input ' prices we have the new index of prices of building materials, and it can reasonably be assumed that volume of inputs will fluctuate with the volume of output shown by the corresponding section of the production index. The implied value of inputs rises more rapidly than is suggested by the National Income White Paper, and it was assumed that the series was subject to a constant upward bias,[2] so as to make our input series compatible with the White Paper.

This method gives rather strange estimates for the first half of 1951. The estimates of gross value of building remained at the end-1950 level, whereas the volume of output, and thus presumably of input, fell sharply. So on our method we obtain a sharp rise in ' added value ' as a residual. This implies, as do the two official series, a corresponding rise in income per unit of output, but possibly one of the official series is misleading.

5. *Utilities*

For this industry there are no satisfactory price indices. We had to fall back on the device of using average hourly earnings multiplied by employment indices to obtain a wage-bill index, and thus an ' added value ' index, assuming constant gross profit margin. This index climbed rather too quickly between 1949 and 1950, suggesting (as does the White Paper) a slight squeezing of profit margins, and its gradient was accordingly adjusted.[3] We should emphasise that this is a different method from those used elsewhere. In a first attempt we tried taking hourly earnings as an indicator of ' unit factor cost ', but multiplying this by the production index gave much too high a rate of climb, because of the rise in productivity. In order to take out the effect of increasing productivity, we tried dividing by a production index and multiplying by an employment index. This amounted to substituting an employment index for a production index and led to our adopting the method actually used. However, both methods gave eventually almost identical answers, if one corrects for the upward bias in each by assuming such a bias constant. Only for two quarters was the difference as great as £10 millions.

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[1] The extent of the discrepancy in coverage between the White Paper estimates of ' added value ' and the Digest estimates is not apparent, but casting the argument in terms of index numbers for ' output value ' and ' input value ' would make no difference to the answer.

[2] Looked at from another viewpoint, the slow implied rise of inputs is due to the fact that the official estimates of gross output and of added value (rather surprisingly) rise at nearly the same rates (4.7 per cent and 4.3 per cent) despite the sharp rise in the prices of building materials.

[3] Strictly the employment index covers salary-earners as well as wage-earners, but this will make little difference in practice.

6. *Services*

For 1949 and 1950, volume indices were used to distribute the annual totals over the quarters. The index for Distribution was obtained from the value of personal consumption at fixed prices, seasonally corrected (see below); for Transport and Communications we used the seasonally corrected Interim Index of Industrial Production and personal expenditure on travel (at fixed prices); and for other Services the index was based on movements in total manpower employed. The tacit assumption here, that ' unit factor cost ' was unchanged, is not likely to be far wrong, but in any case we had no satisfactory alternative. For the first two quarters of 1951, however, the procedure was different. The value of consumers' expenditure was used as a value indicator for Distribution (assuming constant gross margins in distribution). For the other series we could no longer assume unit factor cost constant, and we constructed an index to measure it, based on the wage-rate index, with salaries assumed to move more slowly and profits assumed constant in money terms. This procedure is of course open to many objections, one of which being that part of profits—even if a small--part are being assumed constant, an assumption that will be reflected in the profit residual in Table III. No attempt is made in *this* sector to allow for the squeezing of trading profits, on the definition of profits used here, because of the time-lag before prices rises are passed on to the consumer. To this extent, the contribution of this sector (and thus the national product), particularly in the last quarter of 1950 and the first quarter of 1951, must have been overstated. (This item is the total of items 6, 7, 8, 13 and 16, in the White Paper, Table I).

7. *Total Business Sectors*

Our arrangement does not quite coincide here with that of the White Paper, which has a sub-aggregate entitled ' total production and trade.' The main reason for this difference is that we did not feel able to show separate estimates for the parts of the ' services ' sector which are excluded from this total. However, the White Paper's use of a total here seems in any case rather curious, particularly since it includes the rent of dwelling houses in this sub-aggregate. If it had not done so, one would have assumed that the authors were searching for a variable total, in contrast to public and other services which are not much affected by inflationary or deflationary tendencies. It is difficult to see why rent, particularly on owner-occupied houses, is part of a ' field of production and trade in a broad sense ' and domestic service is not.[1] Our total is that part of the domestic product whose sale is governed in the main by ordinary commercial principles, as opposed to administrative, social and military services, and use of dwelling space.

8. *Government*

This covers items 11 (Public administration and defence) and 12 (Public health and educational services) in the White Paper. The former was broken down into ' depreciation ' (*i.e.* maintenance and amortisation provision), which is assumed to rise at a steady rate; ' Pay of H.M. Forces' which is estimated from changes in the numbers and rates of pay;[2] and 'Administrative salaries and wages ', which are estimated by applying an index of rates of pay (moving steadily at a sufficient rate to be compatible with the White Paper estimates) to an index of employment, adjusting for major changes, such as the recent increases for administrative grades and local government officers. For the smaller part, the health and educational services, there are no estimates available of either employment or rates of pay, and the quarterly series was obtained by direct interpolation, again adjusting for known sharp increases, such as the recent rise in teachers' pay.

9. *Other*

These consist of rent of dwelling houses (item 9 in the White Paper) and net income from abroad (item 16). The former is obtained by interpolation on what is naturally a quite smooth series, and the latter is estimated from the information in the Balance of Payments White Papers (which already gives us half-yearly figures for the most important items).

10. *Gross National Product*

This is defined as in the White Paper, *i.e.* exclusive of what inventory gains would be if inventories were valued at replacement cost, with the qualification for Services noted above.

TABLE II. GROSS NATIONAL PRODUCT AT AVERAGE 1950 FACTOR COST

1. *Agriculture*

This is a very rough series on which we hope to improve in the near future.

2, 3, 4 *and* 5. *Mining, Manufacturing, Building and Utilities*

These are obtained simply by changing the official estimates of ' value added ' in 1950 in the ratio which the seasonally correction production index number for the quarter bears to the average index number for 1950. There are of course the same difficulties as previously noted; the weighting of the index is wrong for this purpose, and the indicators used in the production index are mainly those of ' output ' rather than ' added value '. However, these deficiencies (for our purpose) are not likely to mean great errors in the short run.

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[1] Unless we are reverting to the feudal practice of treating domestic servants as part of the family. Incidentally domestic service is treated as part of ' production ' in the White Paper's Social Accounts.

[2] See note to Table III below.

6. *Services*

The quantity indices used for this have already been described in the note to the corresponding item of Table I. These quantity series are used also here for the first two quarters of 1951.

7. *Total, Business Sectors*

See the corresponding note to Table I.

8. *Government*

The estimate of value added at average 1950 factor cost is treated solely as a function of employment, *i.e.* the structure of employment with respect to pay is considered constant. Employment series are directly available for administration and H.M. Forces. For health and education, an average quarterly rate of increase was obtained by deflating the value series already calculated by the index of pay rates implied by the White Paper for administration. Any attempt to deflate ' depreciation ' seems likely to involve greater error than leaving it undeflated.

9. *Other*

The small growth of rent was presumed to be due half to rising rents and half to increase in accommodation, implying a rise in the latter of just over 1 per cent per annum. It is difficult to interpret what ' net income from abroad ' at fixed prices would mean. The most useful procedure might be to make it a function of net indebtedness. However it would be hard to construct this in view of shortage of information, and the best procedure seems in practice to be to use the actual 1950 net property income throughout.

TABLE III. DISTRIBUTIVE SHARES

1. *Wages*

These estimate are rather firmer than most of our series. Comparison between our results and the official ones for the past two years shows only small discrepancies, and we are retaining the methods we have used previously, which have already been described.[1] Briefly, we adjust the officially estimated totals for changes in employment and wage-rates (as shown by the official series), and allow for other factors, such as changes in hours worked, by using a residual index obtained by comparing changes in weekly earnings with changes in wage-rates. In this set of estimates we have however re-calculated the series to make it conform to the revised annual wage-bills shown in the new White Paper.

2. *Salaries*

This series remains however very tenuous. The long-awaited salary

[1] BULLETIN, October, 1949.

index has not yet been published,[1] and in its absence we have to rely largely on interpolation between annual totals, and on extrapolation for 1951 estimates, with adjustment for known sharp rises (such as the recent increases for teachers and local government officers). We have been tempted to search for association between movements in salaries and in wages, but while there doubtless is some association, it is obscured by time-lags too complicated to permit an estimating formula to be constructed.

3. *Pay of H.M. Forces*

This estimate takes account of changes in both the numbers and the pay of those in the Forces. The only simplifying assumption involved is the fairly reasonable one that the proportions paid at different rates do not alter enough to affect the total cost, and this is also a fairly firm estimate.

4. *Employers' Insurance Contributions*

This item is new to our estimates. Until this year these contributions were treated by the authorities as indirect taxes, which were therefore excluded from the national income. Now the treatment has been reversed, apparently not because of any theoretical reasons, since the only explanation offered is that the new treatment ' follows prevailing international practice '. We will not press the point too far, since we will also be following this practice, for we have decided in principle to spread the official estimates over the quarters (and into 1951), and thus to accept the official definitions. Our estimates for this item are based on the numbers employed.

5. *Rent*

This item is very stable and the estimates show only the gradient implied by the latest White Paper.

6. *Profits*

This item is obtained only as a residual by subtracting the total of the first five items from the aggregate national product. It is very tentative since it may be subject to cumulating errors from other items. It is also defined in a way that reflects the definition of the national product. Thus it is *gross* of depreciation allowances, it contains what profits would be if materials were charged at current replacement cost, instead of original cost, and it excludes inventory gains. This item is of course a very mixed one, covering not only profits of companies and public enterprises but also profits of those self-employed, in the professions, farming, shopkeeping, etc.

7. *Gross National Product*

Same as item 10 of Table I.

TABLE IV. CONSUMPTION

The consumption estimates given in this paper differ in several respects from those published in previous issues of the Bulletin. The seasonally corrected series at current prices have been recalculated. The seasonal correction factors have been derived from the official quarterly current-price consumption data over the four years 1947–1950[1]. Our new correction factors and the data to which we apply them take account of the revisions made in the latest National Income White Paper.

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[1] It is however possible to infer that salary rates inreased approximately 3 per cent on average between 1949 and 1950. The increase of 3 per cent in national insurance contributions by salary-earners (White Paper, Table 27) indicates a corresponding increase in salaried employment, if we assume the structure of employment was unchanged, while the rise in the total salary bill was just over 6 per cent.

TABLE V. CONSUMPTION AT 1948 PRICES

As foreshadowed in the January 1951 issue of the BULLETIN, we have completely changed our method of estimating seasonally corrected consumption at fixed prices. Previously our fixed price series were obtained by deflating seasonally-corrected value estimates with indicies from the Interim Index of Retail Prices. This method was unsatisfactory, both because seasonal correction factors based on value data are not necessarily appropriate indicators of seasonal volume changes, and because of the restricted coverage of the price deflators.[2] We now base our fixed-price series on the official quarterly fixed-price consumption data which are published in the Monthly Digest of Statistics. These data are seasonally corrected by applying ‘ volume ’ seasonal factors derived from the fixed price dates over the two years 1949 and 1950. Although elsewhere in this paper fixed price series are given at average-1950 prices, we have thought it desirable to present the detailed fixed price estimates at average-1948 prices. This is more convenient because the official fixed-price estimates are obtained by revaluing consumption expenditure at average-1948 prices : and a conversion to average-1950 prices would entail using a Paasche-type price index to inflate average-1948 price data. Such a conversion would be inaccurate in so far as the index weights (1950 quantities) were different from the quantity weights appropriate to the consumption of a particular quarter. Quite apart from this teachnicality, the relationships between fixed price and value series can often be seen in a better perspective if the price base is outside the period covered by the series. We do, however also make estimates of total consumption at average-1950 prices for inclusion in the main fixed-price table (Table IX).

TABLE VI. FOREIGN TRADE, NOT SEASONALLY CORRECTED

The methods used in compiling the balance-of-payments estimates have not been altered. On the whole, our preliminary estimates have corresponded closely with the official estimates, and no new information has been made available which would enable us to use more refined techniques of estimating the ‘invisible’ items. Also the recent variations in the margin between the value of merchandise imports (c.i.f.) given in the Trade and Navigation Accounts, and the figure for merchandise imports (f.o.b.) given in the White Papers on the balance of payments, have been decidedly erratic, so that in making preliminary estimates of this margin it seems to be impossible—or at any rate profitless—to work out a technique of estima-

[1] For seasonal patterns, see Appendix II.

[2] For a more extended discussion, see THE BULLETIN for January, 1951.

tion which can be applied mechanically. For this particular set of estimates we already have a Balance of Payments White Paper with estimates for the first half of 1951, and our task is merely to distribute these half-yearly estimates over the quarters, with the help of the monthly returns in the Trade and Navigation Accounts. The estimates of ' invisibles ' are obtained as before by interpolation in individual series.

TABLE VII. FOREIGN TRADE, SEASONALLY CORRECTED

The seasonal correction factors for visible trade have been revised from the new estimates for trade from 1947 to 1950.[1] On the 'invisible' side our only correction is for foreign travel—except that in a sense our estimates are already partly corrected by interpolation in 6-monthly estimates. If, for example, all the dividends in the half-year were paid in one quarter, our method would spread them over the two quarters.

TABLE VIII. GROSS NATIONAL EXPENDITURE AT CURRENT PRICES

1. *Gross National Product at Factor Cost*

From Table I, Item 10.

2. *Net Indirect Taxes*

This is obtained by working out from the White Paper the proportion of expenditure on each item which is accounted for by indirect taxes, net of subsidies. These factors are then applied to each item of consumption and to the other headings of National Expenditure, with adjustment for tax changes introduced with the Budgets and for known changes in rates of subsidy, so as to yield a total of net indirect tax liabilities in respect of the quarter's expenditure. ' Liabilities ' interest us here more than actual ' payments ', which are irregular, partly because we are working in seasonally-corrected terms and partly because the profit series contains no element of reserves for unpaid liabilities of indirect taxes. It is true that the estimates in the White Paper refer to *receipts* of indirect taxes, but these are not likely to differ much from *liabilities* for annual totals.

3. *Gross National Product at current market value*

The sum of items 1 and 2, corresponding to the aggregate in the White Paper with the same name.

4. *Consumption*

From Table IV. Item 9.

5. *Government Current Expenditure*

In making our previous estimates of Government current expenditure in 1950, we were faced with two pieces of evidence which could not be reconciled. Firstly, the forecast for the whole year made in the Economic Survey for 1950 showed that Government current expenditure was expected to increase. Secondly, ordinary expenditure issues from the Exchequer, which are related, though remotely, to the current expenditure of the Central Government, were running at lower levels than in 1949. There are reasons to trust the Economic Survey forecast, which is based on the detailed expenditure estimates which are made by all Government departments and presented to Parliament for approval. Moreover quarterly movements in ordinary expenditure issues are very erratic—in particular there tend to be very large issues in the last quarter of the financial year which may completely invalidate inferences drawn from an examination of issues for previous quarters. In these circumstances, we decided to base our quarterly estimates on the increased total of current expenditure shown in the Economic Survey of 1950. In the event, our faith in this forecast was misplaced, because the expenditure of Central Government departments was not only lower than their estimates implied, but even lower than their expenditure in the previous year. A subsequent check has shown that our errors would however, have been even larger—though in the opposite direction—if we had based our estimates upon the trend of ordinary expenditure issues. Much of the shortfall of Exchequer issues below estimates was concentrated in the Class IX services (Supply, Food and Miscellaneous), and we now know[1] that this fall reflected a very substantial running down of stocks in the trading departments. A run-down of stocks will reduce cash issues, but will not correspondingly reduce current account expenditure which includes expenditure financed by stock falls.

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[1] See Appendix II.

For the current year, happily, the evidence is not so contradictory. A very substantial increase in Government current expenditure (largely due to rearmament expenditure) is forecast by the Economic Survey, which puts 1951 expenditure at £2,510m. as against 1950 expenditure of £2,025m. And Exchequer ordinary expenditure issues in 1951 are running at a higher level than over corresponding periods in 1950. But the problem remains, because the increase in ordinary expenditure issues over corresponding issues last year is by no means as great as might be expected, in view of the large increase in current expenditure which is forecast. Further, we must remember that it is probably legitimate to discount the 1951 issues in order to eliminate those cash issues which are financing both the rebuilding of stocks reduced in 1950, and the purchase of materials for the strategic stockpile. In our estimates for 1949 and 1950 we take a view on the probable movements of expenditure, within the constraints of the annual estimates in the laest National Income White Paper. Our estimates for 1951 are based on a balance of considerations derived from all available sources.

6. *Gross Capital Investment*

The residual obtained by subtracting the other estimates from item 3. In view of the construction of the national product, this is *gross* of depreciation allowances, and excludes all profits from rising prices of inventories, though it includes the value of any physical charge in inventories. It is of course, as a residual, to be deeply suspected.

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[1] From item 75, Table 21, Cmd. 8203.

7. *Export Surplus or Deficit*

From Table V, item 7.

Table IX. Gross National Expenditure at Average-1950 Prices

1. *Gross National Product at* 1950 *Factor Cost*

From Table II, item 10.

2. *Net Indirect Taxes*

Estimated as described in the corresponding note to Table VIII, except that the average incidence of net indirect taxes in 1950 is used for each commodity instead of a varying incidence.

3. *Gross National Product at* 1950 *market value*

The sum of items 1 and 2.

4. *Consumption*

See the notes on Table V.

5. *Government Current Expenditure*

The part attributable to the output of the Government sector, *i.e.* the output of administrative and social services, was taken directly from the estimates in 1950 prices in Table II, item 8. The remainder, *i.e.* purchases from other sectors, we deflated by the ' output ' price index for Manufacturing, constructed as described above.

6. *Gross Capital Investment*

See the corresponding note to Table VIII.

7. *Export Surplus or Deficit*

Visible imports and exports were deflated by the relevant ' average value ' indices for the quarters concerned. Since we want a price series weighted by the current quarter's purchases, and since they have a wider coverage, these seem slightly preferable to the corresponding ' price ' indices, despite the clearer specification of commodities in the latter. ' Invisible ' items present however a more difficult problem. Property income was treated as described in note 9 to Table II, so as to preserve consistency. Since other ' invisible ' payments were largely in respect of goods bought by the Government or tourists overseas, these were also deflated by the ' average value ' index for imports. Our ' invisible ' earnings were however, because of their high ' service ' content, deflated by the unit factor cost for services described in the note to item 6 of Table I, thus again preserving consistency.

APPENDIX II

SEASONAL PATTERNS

Production

In seasonal correction of industrial output, 1948–50 production index numbers were expressed as percentages of trend and averaged[1] to give the following seasonal patterns for the industrial sectors :—

(*Average percentage fluctuation from trend*)

Month	*Mining*	*Manufacturing*	*Building*	*Utilities*	*All Industries*
January	+ 3	—	— 6	+16	—
February	+ 4	+ 4	—	+16	+ 4
March	+ 6	+ 6	— 1	+10	+ 5½
April	— 3	— 3	+ 1	— 4	— 2½
May	+ 1	+ 1	+ 1	— 8	+ ½
June	+ 1	+ 4	+ 5	—12	+ 3
July	—10	— 7	+ 2	—17	— 7
August	—15	—11	— 3	—18	—10½
September ...	+ 2	+ 1	+ 4	—10	+ ½
October	+ 5	+ 3	+ 5	—	+ 3½
November	+ 7	+ 5	+ 1	+11	+ 5
December	—	— 3	— 9	+16	— 2½

The patterns of Mining and Manufacturing output are fairly similar. Mining tends to vary a little more, with a bigger loss in the summer and a bigger gain in the late autumn and early winter. These series show clearly the influence of Christmas and Easter holidays and (to a lesser extent) of Whitsun—Christmas costing about 8 per cent and Easter about 9 per cent of the month's output. They also show the effect of cold weather (and fuel shortage)—compare either February and March or October and November. The same type of pattern is shown in a much more extreme form by Utilities, with a much wider swing, due to the great seasonal fluctuation in use of electricity and gas for heating and lighting, so that production at the winter peak is almost half as high again above the summer trough. Building however shows completely different seasonal influences. The seasonal pattern is not regular enough to justify very firm conclusions, but the warm months are clearly, despite the holidays, much more favourable to building than the winter months, suggesting that the loss of output in the winter months due to the weather must be some 5 per cent (comparing September or June with February and March). The pattern for All Industries is very similar to that of Manufacturing, being however apparently somewhat damped by the wide swings of Building in the opposite direction.

Consumption

The *value* patterns are estimated from 1947–50 consumption series, while for the *volume* series data are only available for 1949 and 1950. However for tobacco we used the volume pattern as representative of fluctuations in value, since data before 1949 are too much affected by Budgetary changes to permit conclusions about seasonal patterns to be drawn (and there is likely to be no seasonal price movement).[1]

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[1] Adjusting where necessary for Easter and Whitsun so as to reach a standard year in which Easter always falls in April and Whitsun in May. 1947 figures are of little use because of the fuel crisis.

Average percentage deviation from trend

	Quarters			
	First	*Second*	*Third*	*Fourth*
	Consumption at current prices (i.e. Value of Consumption)			
Food	— 4½	— 1	+ 3½	+ 2½
Drink	—11	— 4	+ 6½	+ 8½
Tobacco	— 5	——	+ 6½	— 1½
Fuel and Light	+19½	—10	—20½	+11
Household Goods	— 7½	— 3	— 4	+14½
Clothing	—14½	+ 2½	— 6½	+18½
Other Goods and Services ...	— 8½	+ ½	+ 9½	— 1
	Consumption at fixed prices (i.e. Quantity of Consumption)			
Food	— 3½	— 4½	+ 2	+ 5½
Drink	—13½	— 2½	+ 7	+ 9
Tobacco	— 5	——	+ 6½	— 1½
Fuel and Light	+20	— 8	—21	+ 9½
Household Goods	— 7	— 3	— 4½	+15
Clothing	—15	+ 4	— 8	+19
Other Goods and Services ...	— 9½	——	+10½	— 1

The two sets of seasonal patterns which we derive are not strictly comparable, since they are based on data covering different periods—1947–50 for the value series and 1949–50 for the quantity series. The seasonal pattern for quantity is bound of course to be the more tentative of the two, since it is based only on the experience of two years. Nevertheless, it is interesting to note that, in general, the value patterns are very similar to the volume patterns: implying that seasonal variations in consumpton expenditure can be attributed very largely to variations in the volume of consumption. The exception is food. Changes in the volume of consumption are not a sufficient explanation of seasonal changes in expenditure on food. A seasonal variation in prices may have some influence,[2] but it seems likely that seasonal changes in the composition of food expenditure—in so far as the changes involve a substitution between commodities whose prices have moved disparately since the base year—are an important influence.

Foreign Trade

Averaging percentage deviations from trend for 1947–50 we obtain the following rough estimates :—

	Quarters			
	First	*Second*	*Third*	*Fourth*
Imports	— 4	+ 5	——	— 1
Exports	+ 1	— 2	— 2	+ 3

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[1] Seasonal fluctuations in Rent seem negligible and have been ignored.

[2] Particularly since our value data are affected by Budget decisions in the second quarter of the year which change prices. In principle, we would, of course, like to exclude the effect of the Budget, but that is not in practice possible.

These seasonal patterns are necessarily rougher than the others, since trends are less regular and abnormal influences (such as the sudden effect of devaluation) impossible to eliminate. They indicate however why the middle of the year, particularly the second quarter, is generally a bad period for foreign trade (and also for our dollar reserves). This must largely account for the coincidence that the foreign trade crises in 1947 and 1949 both occurred in the autumn. These figures suggest that we may be in danger of being lulled into false security by seasonal improvements in our balance of payments during the winter.

APPENDIX III

A National Retail Price Index (1948=100)

	Total (Current-weighted)	*Total (1948–weighted)*	*Food*	*Drink*[1]	*Tobacco*	*Rent, Rates Water*	*Fuel, light*	*House-hold*	*Foot-wear*	*Other Clothing*	*Other goods and services*
1949 1st quarter	101	101	99	101	101	101	104	102	100	106	102
2nd quarter	103	103	107	98	102	101	100	101	98	107	102
3rd quarter	103	103	106	98	102	101	100	102	98	107	102
4th quarter	102	102	104	99	102	101	103	101	94	106	102
1950 1st quarter	104	104	107	99	102	101	104	102	94	107	104
2nd quarter	106	105	114	95[1]	103	102	102	103	96	107	104
3rd quarter	105	105	109	94	103	102	103	105	98	109	105
4th quarter	106	105	109	95	103	103	107	107	100	111	105
1951 1st quarter	108	107	113	94	104	102	110	113	108	115	105
2nd quarter	113	112	124	95	104	104	111	118	116	122	108

[1] This fall must be almost entirely due to the strengthening of beer permitted in the 1950 Budget, *i.e.* to a quality change.

These index numbers were calculated by dividing official estimates of consumption at current prices by the corresponding estimates at average-1948 prices. The individual series are therefore implicitly current-weighted, or ' Paasche '-type. Since the numbers for individual series would presumably be almost identical if they were 1948-weighted, we have re-weighted the total index number by using 1948 expenditure to weight each individual series, thus obtaining approximate ' Laspeyres '-type indices, given in the second column. A comparison of the two series shows (rather unusually) that the Paasche is the greater, implying that consumption must have increased most in the lines with the greatest price increases. Table V confirms this by showing considerable rises in quantities of food and clothing bought.

Since these index numbers are obtained by dividing numbers which are subject to rounding errors, in both numerator and denominator, of varying fractions of 1 per cent, they are not necessarily reliable to 1 unit—apart altogether from the usual errors of index-making. This is especially true of footwear, whose index numbers may be as much as 2 units wrong for such computational reasons.

AN ANALYSIS OF THE ASSET STRUCTURE OF ESTATES, 1900–1949

Introduction

Economic theory fails to provide an easy method of analysing the changes in individual asset structures. The indifference curve technique loses much of its simplicity when the assumption is introduced that the asset-preference structure is not independent of the asset-price structure. Professor Boulding,[1] however, claims that the asset preference structure can be roughly expressed in terms of a ratio—a ' preferred asset ratio ', that is, the proportion of the value of his total assets which a person wishes to hold in the form in question. Boulding believes that preferred asset ratios reflect the action people take in view of all their expectations of prices and of general economic activity.

Preferred asset ratios certainly express a person's preference structure at any time. They are ' preferred ' in the sense that they are the actual ratios which exist, that is, given the existing quantity of assets and the existing demand for them, they are the results produced by the factors which equate these two quantities. It is not, however, easy to interpret a change in a preferred asset ratio. It may signify a change in the quantity of assets and consequent price revaluations. On the other hand, it may signify a changed preference for any asset. If the price and quantity of an asset do not alter, a changed preference ratio must imply a changed preference schedule, unless the prices and quantities of all other assets have also altered, in which case the changed ratio may be the result of these movements. It may thus be possible for the preference schedule for a specific asset to change without affecting its ' preferred ratio ' because of compensating movements in the prices and quantities of all or any of the other assets held. It would thus appear that unless changes in the prices of, and stocks of assets held are known, that preferred asset ratios do not simplify the task of trying to find out why assets holdings change.

An analysis of the asset structure of estates over a period of years shows how the asset structure has altered. The annual reports of the Inland Revenue Commissioners provide details of the total value of all estates and of their asset structure. Estates are valued each year[2] at current market prices making a sample of the asset holdings of capital owners available each year. Those who die are mainly aged persons and while it is unlikely that their estates are representative of those in the process of being built up, they may, nevertheless, be representative of the majority of capital owners who are in the older age groups.

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[1] Boulding. *A Reconstruction of Economics.* New York, 1950, p. 48 et seq.

[2] The estate duty statistics of the financial year can be taken as fairly closely approximating to the amount of property left in the calendar year because of the delay in administering estates.

In order to apply Boulding's analysis to British estate duty statistics it would be necessary to know the total stocks of all assets, including money but, unfortunately, there is no information about the total stocks or changes in them over the years. Further, changes in the quantity of assets available to capital owners may occur through changes in institutional holdings. The holdings of Government securities by the banking system will, for example, affect both their price and the quantity held by individuals. Moreover, it is not possible to analyse the asset ratios of an estate—but only of all estates together or of all estates within certain capital groups, consequently, it is impossible to evolve a criterion for the complete separation of the objective from the subjective elements involved. Nevertheless, information can be tabulated which shows the changes in the ratios of asset holdings against estimated changes in the prices of, and stocks of, assets held. The asset ratios which are presented in this paper are ratios of the asset structure of individual persons in aggregate, and because no precise method exists with which to interpret the changes that take place over the years the interpretations offered are, of necessity, suggestions rather than explanations.

The Asset Structure during the Inter-War Years

In this section the asset structure of all capital owners will be considered. n a later section the differences between the asset structures of large and mall capital owners will be examined. Table I and Chart I show the disribution of assets during the inter-war years and during the years 1948 and 949. The statistics in Table I refer to Great Britain with the exception of he years 1919, 1920 and 1921 when they refer to the United Kingdom. It s not thought that this seriously affected the comparability of the asset atios during the period. The number of estates valued by the Inland Revenue Commissioners increased from 88,000 in 1920 to 153,000 in 1938 nd their total value increased from £430 million to £600 million.

Government Securities

The ratio that Government Securities[1] formed of the asset structure uctuated between 10.9 per cent (1920) and 15.4 per cent (1930). There ppears to have been a rising trend in this asset ratio throughout the interar years. It was approximately 15 per cent from 1930–1933 and in 1935 nd approximately 11–13 per cent in 1920, 1921 and 1927. In all other years he ratio fluctuated around 14 per cent. The average amount valued was 61 million in the years 1920–1924, £74 million in 1925–1929, £83 million n 1930–1933 and £87 million in 1934–1938. The nominal amount of these ecurities quoted on the Stock Exchange rose steadily from approximately 5.4 thousand million in 1919 to £5.9 thousand million in 1939. The nomnal amount of unquoted securities remained more or less stable at about 2.5 thousand million.[2] The price of Government Securities was low in

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[1] Government securities issued since 1914. Other Government securities are included nder the heading ' Other Securities '.

[2] Pember and Boyle. *British Government Securities in the Twentieth Century.*

TABLE I

The Distribution of Assets in Private Hands from 1919–1949

Assets

Percentages

Date	British Govt. Securities	Dominion, Municipal and Foreign Securities	Stocks and Shares	Cash	Loans	Trade Assets	Insurance Policies	Household Goods	Land	House Property	Ground Rents	Mines	Other Personalty	Other Realty	Total[1]	Deductions as % of Total[2]
1919	16.26		28.50	6.76	6.54	5.14	2.87	3.62	7.79	15.70	0.75	0.26	5.17	0.64	100.00	8.49
1920	10.91	6.48	27.44	7.17	6.98	5.98	3.16	3.65	8.56	15.84	1.14	0.24	1.93	0.52	100.00	9.15
1921	12.22	6.64	26.28	7.88	7.16	4.31	3.19	3.18	7.87	16.07	0.98	0.30	3.41	0.51	100.00	8.99
1922	13.73	7.11	28.28	7.06	7.32	4.09	3.05	3.01	6.15	14.48	1.60	0.88	2.56	0.68	100.00	8.76
1923	14.47	7.97	30.21	6.65	7.33	3.36	3.14	2.75	5.28	13.88	1.02	0.25	3.28	0.41	100.00	7.82
1924	13.54	7.82	30.12	6.49	7.68	3.55	3.10	2.63	5.23	13.76	1.08	0.27	4.17	0.56	100.00	8.05
1925	13.97	7.76	30.48	6.64	7.71	3.60	3.09	2.47	4.93	14.74	1.15	0.56	2.46	0.44	100.00	7.90
1926	14.34	7.52	32.79	6.58	8.42	3.37	3.17	2.52	4.80	13.59	0.73	0.15	1.54	0.48	100.00	7.65
1927	13.27	7.77	30.50	6.49	9.30	3.09	3.25	2.29	3.67	12.86	0.65	0.24	6.37	0.25	100.00	7.21
1928	13.74	7.64	32.84	7.22	8.12	3.06	3.31	2.40	3.78	11.96	1.15	0.17	4.37	0.24	100.00	6.86
1929	13.62	7.97	33.37	7.42	8.76	2.73	3.44	2.43	3.55	13.18	0.48	0.22	2.60	0.23	100.00	7.12
1930	15.36	7.56	31.55	7.27	8.72	3.22	3.93	1.97	3.27	13.42	0.70	0.12	2.66	0.25	100.00	7.13
1931	15.23	7.95	29.57	8.04	9.23	2.70	4.13	1.95	3.47	14.27	0.74	0.16	2.33	0.23	100.00	7.67
1932	15.23	8.51	29.40	7.69	8.51	2.81	3.98	1.69	3.74	14.62	0.90	0.21	2.47	0.24	100.00	7.42
1933	14.93	8.85	29.48	9.59	8.52	2.63	3.81	1.52	3.12	13.64	0.95	0.25	2.50	0.21	100.00	6.74
1934	13.96	9.11	32.23	8.21	8.42	2.60	3.77	1.51	3.02	13.66	0.81	0.18	2.35	0.17	100.00	6.80
1935	15.09	7.35	33.43	8.59	8.41	2.15	3.66	1.38	3.09	12.84	1.02	0.22	2.47	0.30	100.00	6.60
1936	13.77	7.27	34.78	8.37	8.13	3.26	3.78	1.32	2.78	12.71	1.14	0.10	2.36	0.23	100.00	7.26
1937	14.04	6.57	33.95	9.37	8.45	2.72	4.01	1.45	2.68	13.19	0.88	0.11	2.34	0.24	100.00	7.06
1938	14.35	6.77	31.92	9.57	9.19	2.27	4.18	1.42	2.82	13.84	0.89	0.07	2.42	0.29	100.00	7.06
1948	17.05	2.97	32.63	10.92	6.48	2.80	2.61	2.73	2.88	14.37	0.62	0.06	3.63	0.25	100.00	4.72
1949	18.09	2.92	30.76	11.90	6.39	2.83	2.51	2.34	3.07	14.87	0.44	—	3.66	0.22	100.00	4.64

[1] The percentages are of the gross value of estates.

[2] Official deductions allowed against the gross value of estates. Estate duty is assessed on the net value of estates.

1920 and 1921 ; was fairly steady until 1932 when it rose as a result of the cheap money policy and it remained high throughout the 1930's.

Government Securities are usually thought to be held mainly for their income earning capacity, and it would be expected that preference for them would be high when their prices were low and vice-versa. An examination of the ratios contained in estate statistics, however, provides very little evidence.

In the years of low price (1920 and 1921) the asset ratio was low, but in 1922 when the price rose approximately 17 per cent the asset ratio rose only 12 per cent. This would appear to indicate a movement out of these securities (if the quantity and prices of other assets did not change). Further the prices of house property and land were high in 1920 and 1921 and consequently so were the ratios for these assets. This would have depressed the asset ratio for Government Securities even though actual holdings were high. In 1932, when the price rose approximately 18 per cent, the ratio, already high, did not change. Again, this would seem to imply a movement out of Government Securities unless the price of other assets had increased. On the whole, it seems unlikely that the prices of other assets rose very much, if at all, and that such a movement probably did take place, despite the fact that these are the most ' liquid ' of all securities. It has already been suggested that movements in the quantity of assets held by institutions affects personal holdings and it is possible that in the early 1930's that the acquisition of Government securities by the banking system made possible a movement out of them by individual capital owners.

Industrial Securities

The asset ratio of industrial securities during the period fluctuated from 26 per cent (1921) to 35 per cent (1936). The ratio was high in the years 1926, 1928, 1929, 1935 and 1936, and low in 1919–1922, and 1931 to 1933. The price of industrial securities was high in 1928, 1929 and 1936 and was low in 1921 and 1932. New issues[1] for the five years ending 1930 averaged annually £284 million and for the five years ending 1937 £163 million.

It is likely that in the inter-war years the greater part of any new issues was taken up by private investors. The fluctuations in this asset ratio would thus appear to follow closely the variations in the flow of new issues and variations in price.

Cash

The trend of the liquidity ratio appears to rise in this period. It fluctuates from 6.5 per cent to 9.5 per cent. It is high throughout the 1930's (especially in 1933, 1937 and 1938, and is low from 1923–1927). It is interesting to note that the ratio is high both in 1932 at the beginning of recovery and in 1937–38 at the beginning of a new depression.

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[1] cf. Paish. Economica. February 1951. *The London New Issue Market*, who quotes Midland Bank's figures of new issues. Government Securities, bonus and vendor's shares are omitted and also resales of long-held shares by existing shareholders and conversion issues.

Loans

This is a miscellaneous item comprising loans of many types—loans on real estate, on bonds, bills and notes and personal and other loans. The asset ratio fluctuates from 6.5. per cent to 9 per cent and appears to rise throughout the period. It rose sharply in 1927 and remained high throughout the 1930's.

Trade Assets

The ratio of trade assets in private hands fell in the inter-war years. It is difficult to believe that the price of such assets fell throughout the period and the decline may be primarily due to the growth of private companies.

Insurance Policies

The ratio that this asset forms of all asets is interesting as the quantity is probably not one which is continually altered; fluctuations in the ratio are probably largely due to fluctuations in the price of all assets. The ratio was practically constant in the 1920's and rose somewhat in 1930, 1931, 1932 and in 1937 and 1938.

Household Goods

The asset ratio of these goods fell during the period. It is difficult to account for this decline since it is unlikely that the amount of such goods in private hands fell appreciably; indeed, the total amount may have increased as the result of the marketing of new durable goods, motor-cars, radios and vacuum cleaners. It would appear that the second-hand price of such goods declined in this period and that people were either content to allow this process to go on, or were unable to reverse it. It may be that any increased demand for household durable goods would have had no effect on the market price for second-hand goods but would immediately have been satisfied by the output of new goods. There may also have been some under-valuation of this asset by the Inland Revenue Commissioners in small estates. The number of estates of £100[1] to £1,000 increased from approximately 63,000 to 97,000 in this period.

Agricultural Land

The asset ratio of land declined noticeably. It fell from 8 per cent in 1919 to below 3 per cent in 1938. The decline would suggest either that the price of agricultural land fell drastically relatively to other assets in this period or that the quantity of land as a proportion of total assets fell. Both factors were probably present. Rents declined in the inter-war years: 'Studies in the economics of landownership suggest that in the worst years between the wars at least 10 per cent of the total annual rent of farm land was being remitted, while amounts outstanding from previous years probably came to nearly 20 per cent of a year's rent, on the average. Besides this, considerable amounts were completely written off.'[2] Land was also sold for building purposes, particularly in the 1930's—(the asset ratio of house and business property rose slightly in the 1930's). It is, therefore, likely that land did decline in value and that some land was sold. The increase in the quantity of securities has already been noticed. It is probable that land remained in the possession of the long established capital owners, while new owners of capital preferred to acquire other assets. The average amount of land valued was £31 million in the years 1920–1924, £22 million in 1925–29, £18.5 million in 1930–1933 and £17.5 million in 1934–1938.

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[1] Estates of £100 and less were not liable to estate duty.

[2] *Westminster Bank Review*, May 1949. *Farm Incomes, Rents and Land Values*, p. 18.

House and Business Property

This asset fluctuated from 12 per cent (1928) to 16 per cent (1921) of total assets. It was above 14 per cent in 1919–1922, 1925, 1931 and 1932, and was below 13 per cent in 1927, 1928, 1935 and 1936. The increased ratio in 1919 and 1922 is probably due to the post-war price boom for house property and in 1931–1932 it may be due to the low prices of other assets. Again, in the years when the ratio was below 13 per cent it was probably caused by the rise in the price of other assets rather than by a fall in the amount of house property held. It would thus appear probable that the asset ratio of house property was more or less stable. There are, however, differences in the holdings of this asset by large and small capital owners and these will be examined below.

Other Property

This heading covers property such as ground rents, mines, sporting and manorial rights, timber, expectant interests and income due at time of death. The percentage of other property was higher in the 1920's than in the 1930's. It was almost constant at 3–4 per cent in the 1930's and varied from 3–7 per cent in the 1920's. Variations cannot be explained but the decline in the 1930's may be due to the general decline in the value of real property.

Conclusion

The asset structure between the wars appeared to alter in the following manner; the ratio of total assets formed by land, household goods and trade assets declined; while the ratio consisting of cash and loans increased; the asset ratios of securities (Government and Industrial) fluctuated; and the asset ratios of insurance policies and house property remained more or less stable.

It is interesting to compare this situation with that of the years 1948 and 1949 and with the pre-1914 period. This will be attempted below.

Changes in the Asset Structure between 1938 and 1948

Details are available of the asset structure of capital owners for two post-war years—1948 and 1949. The following changes appear to have taken place since 1938. Government securities as a proportion of total assets have substantially increased (by more than 20 per cent). The price of Government securities rose in the early post-war years but in 1948 and 1949 the price of 2½ per cent Consols was only 7 per cent greater than in 1938.

The increase in the price of some other Government securities was greater than that of 2½ per cent Consols[1] but it seems unlikely that the increase in this asset ratio can be accounted for solely by price changes (particularly as the price increases were less than those of other assets, for example, house property), and that it was caused by a change in the quantity of Government securities held. This change is probably not a change of ' preference ' for the quantity of Government securities increased greatly[2]; capital owners might have preferred to take up other assets but these were in limited supply. On the other hand a movement out of Dominion, Municipal and Foreign securities has taken place. The sale of American securities, possible default on some foreign securities and repayments of Municipal securities during the war years have caused this change.

The ratio of industrial securities appears to have changed very little since 1938. It must be remembered that in 1948 and 1949 the price of such securities had increased less than some other assets[3] and further, that issues of new securities were controlled by the Capital Issues Committee.

The liquidity ratio is high in both years but is higher in 1949 than in 1948. High prices of consumer goods may account for this and perhaps the Special Contribution levy of 1948 encouraged investors to hold high cash balances in 1949. Uncertainty of future Government policies may also have been a contributory factor.

Trade assets and household goods both form a slightly higher ratio of all assets than in pre-war years. High second-hand prices caused by shortages and purchase tax on many new goods probably account for this increase. The ratio of loans has fallen. This is probably the result of both an unwillingness of creditors to lend in times of rising prices and of the fact that loans contracted at earlier dates have fallen in value relatively to other assets.

The asset ratio of insurance policies is smaller in post-war years than in 1938. It has already been suggested that insurance policies probably are a constant quantity, and that changes in the asset ratio reflect changes in the prices of other assets. This would seem to be confirmed to some extent by post-war data for many of the insurance policies included in each year's sample of estates are those of older people. The insurance contract was probably made in earlier years and even if the premia had been subsequently increased the capital sum would not have been greatly increased for an older person. As the amount of money set aside in the form of insurance premia has increased by approximately 70 per cent since 1938[2] it appears that younger capital owners were entering into policies that would probably restore the ratio between insurance policies and other assets.

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[1] For example, 3 per cent National Defence Loan, 10 per cent increase ; 3½ per cent increase Conversion Loan, 9 per cent increase ; 2½ per cent Funding Loan, 11 per cent increase. cf. Pember and Boyle—*British Government Securities in the Twentieth Century.*

[2] The nominal amount of securities quoted on the Stock Exchange increased from £6 thousand million to £12.5 thousand million. The nominal amount of unquoted securities increased from £2.5 thousand million to £13 thousand million.

[3] *London and Cambridge Economic Service.* Index of Security prices. 1938=100. 1948=139, 1949=132.

The ratio of land to total assets remains small but it is slightly higher than in 1938. The value of land has, however, increased substantially since pre-war years.[1] 'Averages describe the position inadequately, but it can be said that whereas in 1938 a typical price would be £27 an acre, in 1948 this had increased to £70.'[2] It would be expected that an increase of 160 per cent in the value of land (which is much more than the rise in price of Government or Industrial securities) would reflect an increased preference for this asset and the fact that the average asset ratio remains practically unchanged is perhaps caused by two factors. The first is that the fall in the value of land in pre-war years was so large relatively to the prices of other assets that the post-war increase did not do more than begin to reverse the previous downward trend in the asset ratio. The second factor is that the post-war demand for land probably came from younger people and that consequently the increased preference is not reflected in the sample of estates examined. Again, some land had passed out of private hands by 1948 and as the number of capital owners had increased since 1938 it is probable that land forms a small proportion of all private assets and that a very large change in price would need to take place before the average ratio was substantially altered.

The ratio of house property has increased, but, again the increase would not appear to be large in relation to the rise in the price of house property since 1938. It is, however, likely that the ratio shown in Table I does not reflect the full increased price for house property. If a house continues to be occupied by the surviving spouse an 'owner occupation valuation' is accepted by the Inland Revenue Commissioners which is well below market price (with vacant possession). The post-war ratio for house property is, therefore, perhaps distorted and it may, in fact, be higher than is suggested in Table I. On the other hand, the return from house property is not large, indeed many landlords would say that the 'net' return was negative, and some reluctance to purchase house investment properties seems to have been shown since 1939 in spite of the generally lower yields on all forms of capital.

Conclusion

The striking changes in the asset ratios between 1938 and 1948 took place among the following assets: Dominion, Municipal, and Foreign securities, and loans—a decreased ratio; Government securities and liquidity—an increased ratio. It is likely that these changes were caused more by changes in the supply of the assets available than by changes in the demand for them. Little change occurred amongst the other assets. The trends noticeable before the war were in these cases continued.

[1] Premium income, Life Assurance Companies (U.K.), 1938 £91 m. 1948 £157 m. cf. Annual Abstract of Statistics No. 87.

[2] *Westminster Bank Review*, May, 1949. Farm Incomes, Rents and Land Values, p. 19.

THE ASSET STRUCTURE FROM 1899–1914

The statistics provided in the Inland Revenue reports for the period 1899–1914 are not directly comparable with those provided after 1918. The statistics refer to the United Kingdom, while those of the inter-war years refer only to Great Britain, but this may not appreciably affect a comparison of asset ratios. Further, the earlier figures are not as complete as those of the inter-war years because they exclude a substantial amount of settled capital which paid a separate Settlement Estate Duty. Thus, in any comparison of the asset ratios of real estate between the two periods, the pre-1914 ratios should be increased. Again, the classification of assets was not as detailed as it subsequently became. Settled property (Personalty), gifts, property situated abroad and joint property were not divided among the relevant assets. An attempted classification of this property has been made but the miscellaneous item in Table II ' Other Personalty ' is larger than it ought to be because of the inclusion of unclassifiable assets, for example, the amount of property situated abroad, gifts and joint property. These factors affect comparability between the periods, before and after 1914, but, of course, do not affect comparability within either period. Table II shows the distribution of assets during these years.

British Government Securities

The ratio of this asset was small; a declining trend with minor fluctuations is observable. The large post-war increase[1] in the ratio must imply a corresponding decrease in the ratios of certain other assets. The decrease is concealed to some extent by the large miscellaneous items of ' Other Personalty '. Much of the property under this heading, for example, property situated abroad, is probably real property. A decrease is noticeable in the ratios of ' Other Realty ' (a comparable item between the two periods). The ratio of land is also lower after the 1914–18 war. It is probable, therefore, that the increase in the asset ratio of securities took place at the expense of real property. It is perhaps likely that new capital owners acquired securities and not real property. The value and return from real property dropped from 1870 onwards.

Industrial Securities

A rising trend is noticeable in the holdings of industrial securities during this period. The asset ratio fluctuates between 29 per cent (1901) and 40 per cent (1911), and is on the whole higher than that of the inter-war years (26 per cent–35 per cent). There was in general a tendency for economic activity to increase in this period. ' Income-tax statistics point to a very rapid increase in profits in the period under discussion; while the yield on new capital seeking investment was much higher than in the 'nineties, thanks to fresh openings for capital in all parts of the world.'[2] It is not, therefore,

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[1] From 1920 onwards the preferred ratio is for Government Securities issues since 1914. The ratio would be still higher if all Government securities could be taken into account.

[2] Layton and Crowther. *The Study of Prices*, p. 117.

TABLE II

The Distribution of Assets in Private Hands from 1899–1914

Assets *Percentages*

Date	British Govt. Securities	Dominion Municipal and Foreign Securities	Stocks and Shares	Cash	Loans	Trade Assets	Insurance Policies	Household Goods	Land	House Property	Ground Rents	Mines	Other Personalty	Other Realty	Income Due	Total	Deductions as % of Total
1899	4.20	3.10	31.00	6.23	8.70	2.24	2.83	1.90	8.40	11.70	1.90	0.20	11.00	5.70	0.90	100.00	10.13
1900	3.97	3.18	30.50	6.37	9.30	2.30	3.09	1.97	8.70	12.50	1.16	0.50	9.48	5.98	1.00	100.00	10.20
1901	3.10	3.78	28.70	5.40	9.05	2.10	2.87	2.03	9.00	12.10	5.53	0.28	9.05	6.17	0.84	100.00	9.85
1902	3.63	3.18	31.41	6.05	9.55	2.35	3.22	2.05	8.40	12.66	1.38	0.20	9.41	5.71	0.80	100.00	9.40
1903	3.68	4.03	32.60	5.67	8.97	2.25	3.38	2.22	7.70	12.40	1.40	0.20	8.80	5.85	0.85	100.00	9.90
1904	3.57	3.20	31.80	5.89	10.05	2.25	3.34	2.15	7.45	12.58	1.40	0.34	8.88	6.28	0.82	100.00	9.60
1905	3.32	3.36	33.00	5.60	9.25	2.24	3.04	2.20	8.10	12.40	1.19	0.46	9.44	5.57	0.83	100.00	10.25
1906	3.36	3.69	33.85	5.73	9.15	2.01	2.93	2.07	7.10	11.10	1.71	0.46	10.65	5.40	0.79	100.00	9.10
1907	3.22	3.57	34.30	6.15	9.15	2.10	3.16	2.23	7.58	11.66	1.43	0.44	8.19	6.03	0.79	100.00	10.05
1908	3.00	3.80	32.75	5.92	10.20	1.99	3.08	2.05	7.11	11.50	1.00	0.16	10.66	5.85	0.93	100.00	10.26
1909	2.90	3.90	32.50	5.30	9.00	2.00	3.30	2.22	6.33	10.40	1.30	0.20	14.02	5.83	0.80	100.00	9.20
1910	2.63	3.66	34.05	5.92	9.72	2.03	3.46	2.73	6.00	10.90	0.70	0.20	11.57	5.63	0.80	100.00	9.25
1911	2.84	4.31	39.70	6.50	8.80	1.89	3.30	2.81	5.84	10.90	1.00	0.29	5.58	5.36	0.88	100.00	9.25
1912	2.12	3.40	36.40	6.00	9.00	1.90	3.26	2.20	6.13	11.80	0.62	0.39	10.89	5.11	0.78	100.00	9.03
1913	2.41	3.76	39.20	6.52	9.24	2.01	3.40	3.00	5.61	10.30	0.52	0.20	7.63	5.30	0.90	100.00	9.55
1914	2.36	3.27	33.15	6.01	8.17	1.95	3.68	2.30	8.05	12.60	0.76	0.35	10.45	6.10	0.80	100.00	10.33

surprising that the ratio of industrial securities was high during the years 1900–1914. There is a tendency for the ratio to be high in the years preceding a boom—1905 to 1907 and 1911–1913. This tendency is also noticeable in the inter-war years. It would appear that the prices of industrial securities rise relatively more than those of other assets in such years. (The ratios of house property and land are relatively low in these years.)

Cash

The liquidity ratio appears to remain almost constant in this period (5.7 per cent to 6.3 per cent). It is noticeable that in the inter-war period the ratio is consistently higher and, moreover, is continually increasing. The pre-1914 era did not suffer the uncertainties of the inter-war years and it would be expected that the liquidity ratio would be lower. In this period the liquidity ratio is slightly higher in the boom years of 1900, 1907 and 1911–1913 than in other years. In the inter-war years there is a tendency for the liquidity ratio to be high in depression years—1921, 1931–33 and 1938. This suggests that some idea of ' normal ' prices prevailed before 1914 and that cash was held in the boom years in the expectation that prices would fall, but, that after 1914 confidence in a ' normal ' price level was lost.

Loans

The asset ratio for loans is higher in the years before 1914 than in the inter-war years. It appears to be slightly lower in boom years than in other years.

Trade Assets

Trade Assets appear to remain a constant ratio of total assets during these years.

Insurance Policies

The ratio of this asset is lower in boom years than in other years and this appears to be consistent with the explanation already put forward that fluctuations in this asset ratio probably reflect changes in the prices of other assets. It will be noticed that the ratio fluctuates between 3 and 4 per cent both before and after the first world war.

Household Goods

Variations in the holdings of this asset are small. The asset ratio appears to rise slightly by the end of the period—possibly indicating that capital owners had more household goods.

Land

The tendency noticed before, for the ratio of land to other assets to decline can also be seen in this period. This is probably caused by the factors mentioned previously, namely, the absolute fall in the value of land, and its fall in price relatively to that of other assets and a possible tendency for new capital owners not to invest in land.

House Property

This asset ratio fluctuates between 10.5 and 12.5 per cent. It is higher in the years 1899 to 1905 than in the years 1906–1914. This probably reflects the greater prosperity of the later period and consequent preference of capital owners for industrial securities.

Conclusion

The preference of capital owners for different types of assets does not appear to have changed greatly before 1914. The asset ratios are almost constant for many assets (for example, Government securities, Dominion and Municipal securities, Cash and Trade Assets). Variations are found in the ratios for industrial securities and for real property. It would appear that the preference for industrial securities had increased by the end of the period while that for real property had decreased. This movement probably largely reflects movements in the prices of the assets of old established capital owners but by 1914 it may reflect to some extent a possible disinclination on the part of new capital owners to purchase real property.

CHANGES IN THE ASSET STRUCTURES OF LARGE AND SMALL CAPITAL OWNERS

The asset structures of large and small capital owners do not differ significantly from the aggregate asset structure already considered. There are, however, differences in the magnitude of the ratios and these will be examined below. Charts A to F illustrate the asset ratios of different capital groups for the years 1907[1]–1949. Information does not exist for the years before 1907 and, unfortunately, no division was made by the Inland Revenue Commissioners in the classification of the item ' Securities ' until 1920.

Small Capital Owners

It will be noticed from Charts A to F that small capital owners have a high asset ratio for house property and for cash. In spite of what has been said[2] about house property it may be that in the lowest capital group (below £1,000) that the ratio holding increased during the inter-war years. It is likely that this movement is due to an increase in the absolute amount of property owned by this group and is not caused only by changes in the prices of other assets. Chart B shows that the ratio of industrial securities declined in the same period and the increased preference for house property may have taken place at the expense of this asset.

The ratio of cash is high for all capital owners with less than £5,000, and it would appear to have increased during the 1930's. The high cost (including risk) of small investments in securities probably accounts for the high cash ratio. The increase during the 1930's may be due to the low market price of other assets held by these capital owners and if this explanation can be accepted the conclusion reached above with reference to the increased preference for house property is reinforced.

Government securities, loans and insurance policies appear to form a fairly high percentage of all the assets held by small capital owners. The term ' Government Securities ' does, however, include National Saving

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[1] The considerations mentioned before in connection with the statistics available before 1914 apply also to this section.

[2] Vide supra, p. 344.

Certificates and may in the lowest capital group consist mainly of these assets. Personal loans may account for a large proportion of this asset and industrial insurances probably account for the fairly large ratio of insurance policies.

Large Capital Owners

Charts A to F show that large capital owners have a high asset ratio for securities. Industrial securities formed between approximately 35 per cent to 50 per cent of all assets held by capital owners with more than £50,000 in the inter-war years and all securities formed between approximately 54 per cent to 75 per cent of all assets for these capital owners. It will be noticed that the fluctuations in the asset ratios of large capital owners are greater than those of other capital owners. These fluctuations may be partly explained by the small size of the sample examined each year. The number of estates of over £100,000 examined each year during the inter-war years varied from 400 to 600 and the inclusion of estates between £50,000 and £100,000 would increase these figures to approximately 1,000 to 1,500. The variations in the asset ratios cannot, therefore, be solely explained by the small size of the sample.

It will be noticed that although the asset ratios of each capital group differ, the relative changes between capital groups are few. It is interesting to notice that this situation was not disturbed by either the 1914–1918 war or by the recent war.

Conclusion

The analysis of the asset structure of estates since 1900 provides some indication of how changes in preferences have varied with the level of economic activity. The most noticeable long term change has taken place in the preferences shown for Government securities and for land. The proportion that Government securities form of all assets has increased five-fold,[1] while the proportion of all assets formed by land has decreased by approximately 60 per cent. It is unlikely that this movement will be reversed as land is the sole wealth of a poor community—but as the prosperity of a community increases more and more types of claims to wealth appear as the ownership of capital becomes diffused.

Perhaps the most interesting conclusion to emerge from this study is that the observed trends and even fluctuations from the trends have been very similar in all capital groups. Large capital owners have shown an increased preference for industrials while small capitalists have turned away from them, but this is the only important divergence. Finally, changes in supply appear to have been dominant in determining the way in which capital owners held their wealth.

KATHLEEN M. LANGLEY.

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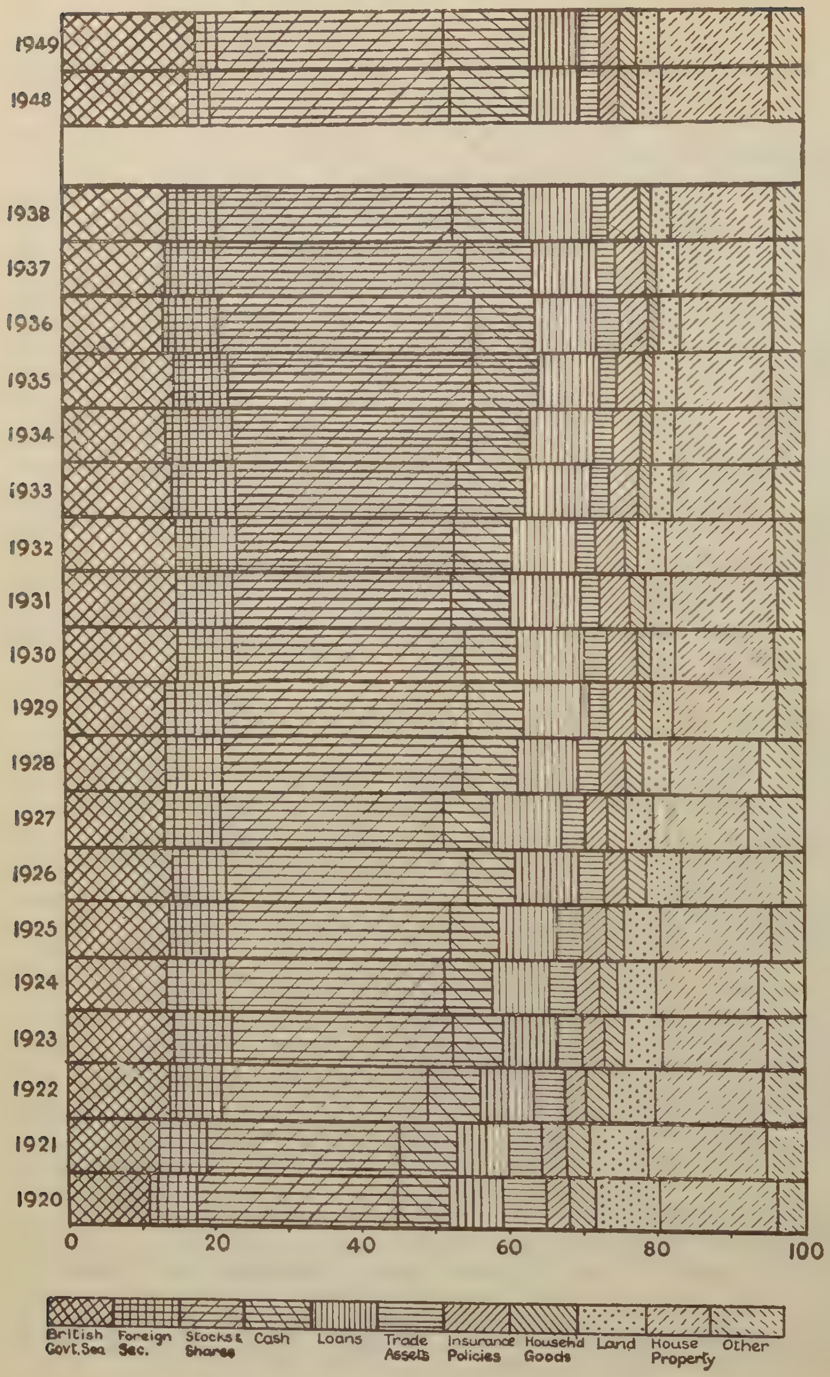
[1] The nominal amount of British Government Securities quoted on the Stock Exchange has increased from £569 million to £12,514 million—a twenty-one-fold increase.

CHART I. DISTRIBUTION OF ASSETS, 1920–1949



CHARTS A–F. DISTRIBUTION OF ASSETS BY CAPITAL GROUPS

CHART A. GOVERNMENT SECURITIES

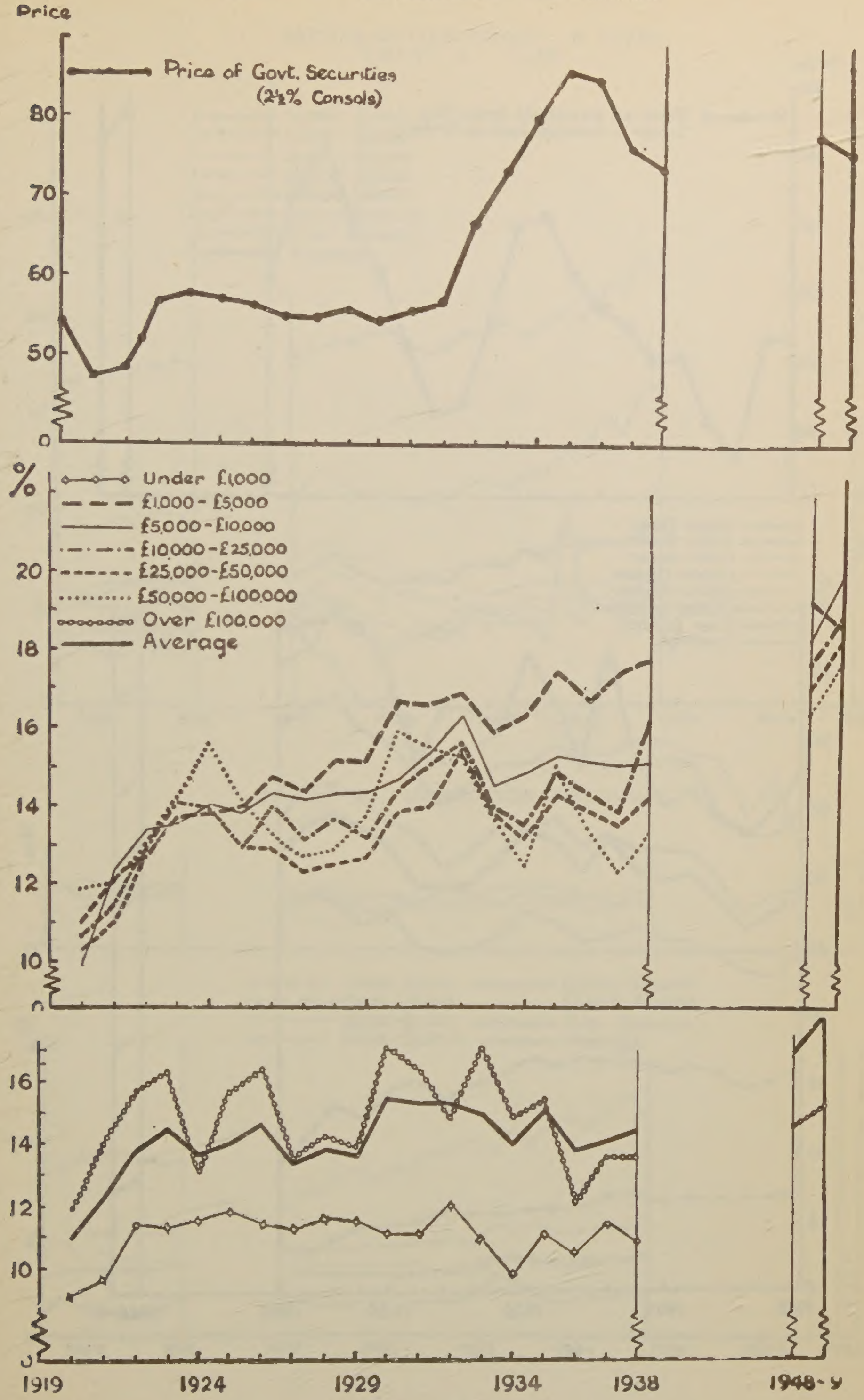


CHART B. INDUSTRIAL SECURITIES

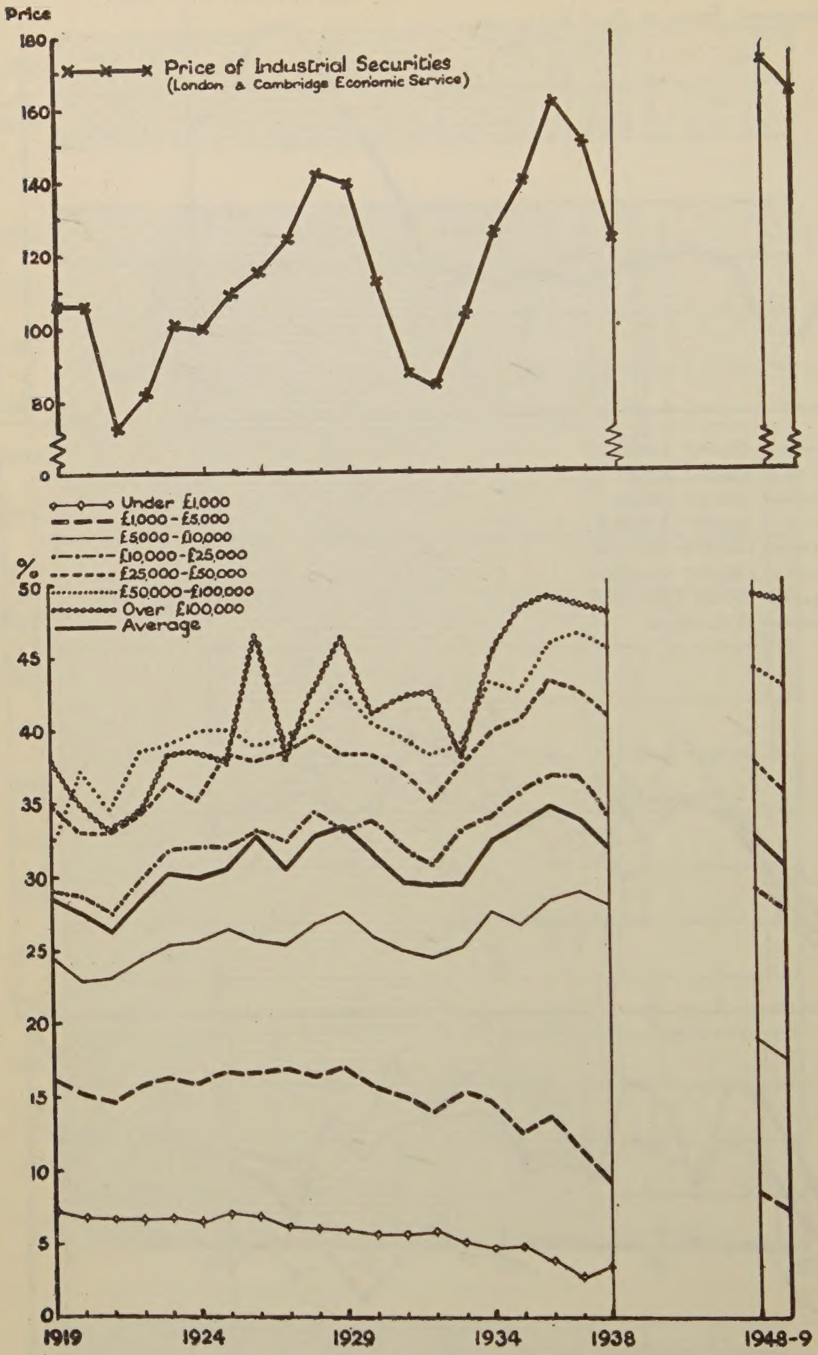


CHART C. CASH

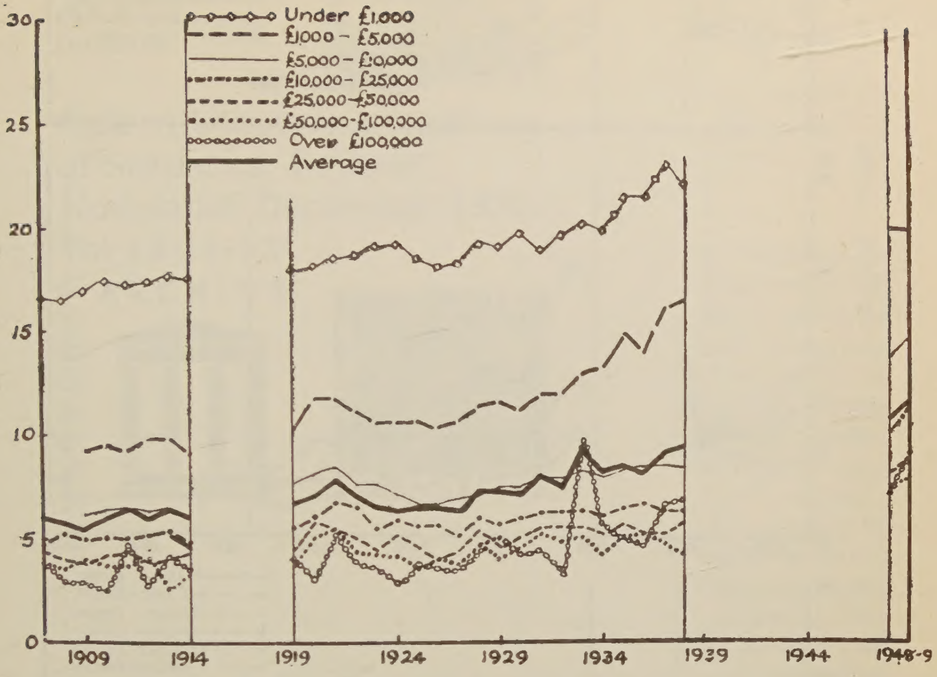


CHART D. INSURANCE POLICIES

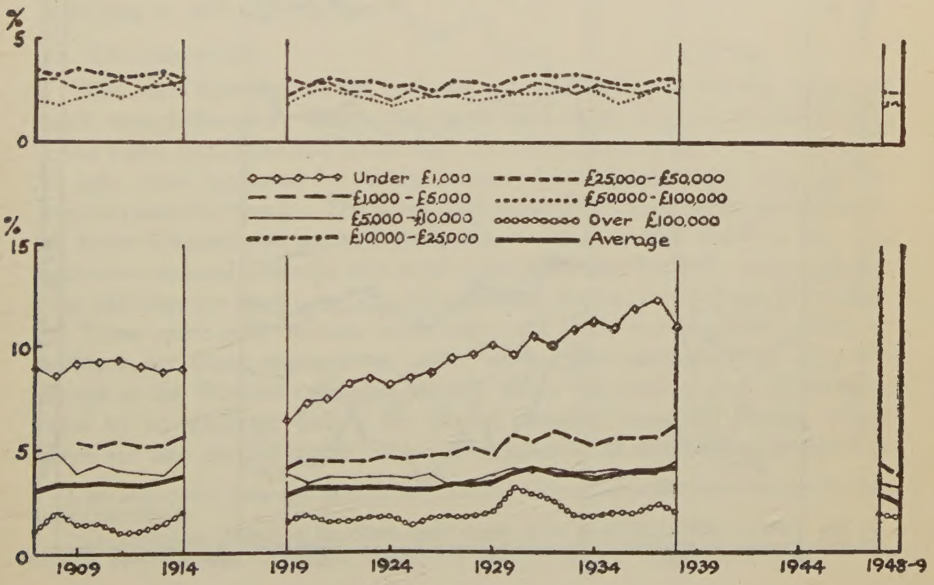


CHART E. LAND

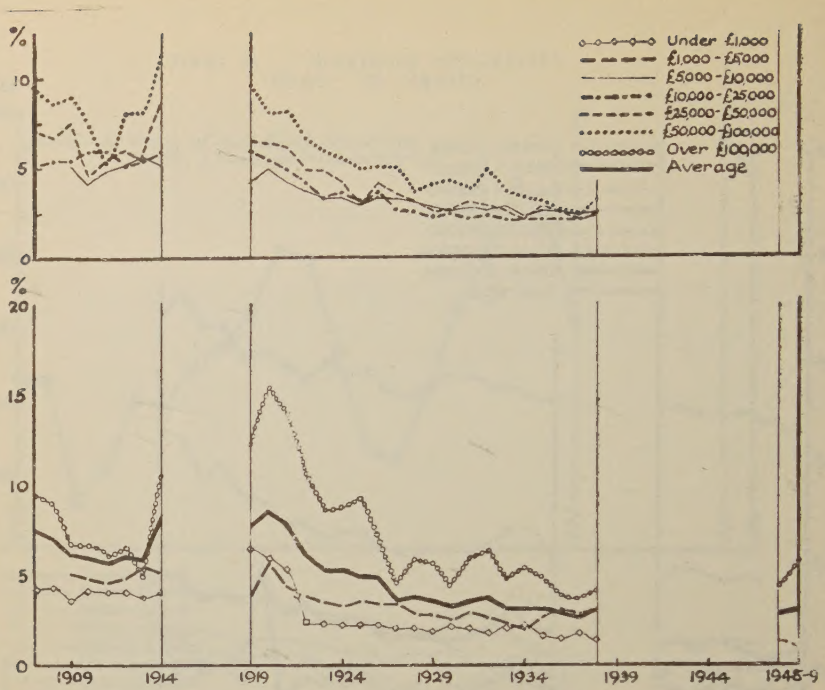


CHART F. HOUSE AND BUSINESS PROPERTY